MSDS for #2454				
	7 - MARB AQI	UA PEN GRAP	IX	Page
Safety data she	et in accorda	nce with regul	lation (EC) No 1907/2006	
Frade name: Ma	arabu Aqua Pe	en Mega Mash	12pcs MNA 037	
		- 3	Version: 2/GB	Date revised: 24.01.2020
Substance numb	per: 0145900	000100-037	Replaces Version: 1 / GB	Print date: 12.05.23
<u>SECTION 1:</u> company/ur			<u>e substance/mixture a</u>	nd of the
1.1. Product	identifier	ga Mash 12pcs	5 MNA 037	
		•	substance or mixture and	uses advised against
Use of the su				C
Paint				
Identified SU21	USES	Concurrent	oo: Drivoto householde (a public - concumerc)
PC9a			es: Private households (= genera paints, thinners, paint removers	ar public = consumers)
1.3. Details o	of the suppl	ier of the sa	fety data sheet	
Address/	Manufacture	er	-	
		KG		
Telepho Informa	one no. tion provided	+49-7141/691 Department p	-	
by / tele	phone			
É-mail a	address of responsible SDS	PRSI@marab	bu.com	
E-mail a person for this s 1.4. Emerger	responsible SDS	ne number	bu.com	
E-mail a person f for this s 1.4. Emerger (+49) (0	responsible SDS ncy telepho))621-60-43333	ne number 3		
E-mail a person f for this 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific	responsible SDS hcy telepho))621-60-43333 : Hazards : Hazards :ation of the	ne number ³ identificat e substance	<u>ion</u> or mixture	- (EC) No 1272/2008
E-mail a person of for this 5 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro	responsible SDS ncy telepho 0)621-60-43333 Hazards thation of the oduct is not cla	ne number ³ identificat e substance	ion	n (EC) No 1272/2008.
E-mail a person i for this 5 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro 2.2. Label ele	responsible SDS ()621-60-43333 ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-43333 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-60-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63 () ()621-63	ne number 3 identificat e substance assified hazardo	ion or mixture bus in accordance with Regulation	n (EC) No 1272/2008.
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E-mail a person of for this 5 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro 2.2. Label ele Labelling EUH208	responsible SDS ncy telepho 0)621-60-43333 Hazards tation of the oduct is not class ements g according 8 Contains	identificat identificat substance ssified hazardo to regulatic reaction mass 2-methyl-2H-i	ion or mixture bus in accordance with Regulation on (EC) No 1272/2008	zol-3-one and
E-mail a person of for this 5 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro 2.2. Label ele Labelling EUH208 Suppleme	responsible SDS ncy telepho ()621-60-43333 Hazards tation of the oduct is not cla ements g according 8 Contains ental information	identificat identificat e substance ssified hazardo g to regulatio reaction mass 2-methyl-2H-i ation	tion or mixture bus in accordance with Regulation on (EC) No 1272/2008 s of 5-chloro-2-methyl-2H-isothiaz sothiazol-3-one (3:1), May produc	zol-3-one and
E-mail a person i for this 5 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro 2.2. Label ele Labelling EUH208 Suppleme Labelling Contain	responsible SDS ncy telepho 0)621-60-43333 : Hazards cation of the oduct is not cla contains g according 8 Contains ental information	identificat identificat e substance ssified hazardo g to regulation reaction mass 2-methyl-2H-i ation to regulation o duct: reaction	tion or mixture bus in accordance with Regulation on (EC) No 1272/2008 s of 5-chloro-2-methyl-2H-isothiaz	zol-3-one and ce an allergic reaction.
E-mail a person i for this 3 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro 2.2. Label ele Labelling EUH208 Suppleme Labelling Contain 2-methy 2.3. Other ha	responsible SDS incy telepho (0)621-60-43333 Hazards tation of the oduct is not class cation of the cation of th	identificat identificat e substance ssified hazardo g to regulation reaction mass 2-methyl-2H-i ation to regulation o duct: reaction	tion or mixture bus in accordance with Regulation on (EC) No 1272/2008 s of 5-chloro-2-methyl-2H-isothiaz sothiazol-3-one (3:1), May produc (EU) No 528/2012 mass of 5-chloro-2-methyl-2H-iso	zol-3-one and ce an allergic reaction.
E-mail a person i for this s 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro 2.2. Label ele Labelling EUH208 Suppleme Labelling Contain 2-methy 2.3. Other ha No spec	responsible SDS incy telepho (0)621-60-43333 Hazards tation of the oduct is not class cation of the cation of the ca	identificat identificat substance substance substance substance reaction mass 2-methyl-2H-it ation or egulation oduct: reaction ol-3-one (3:1) ave to be mentio	tion or mixture bus in accordance with Regulation on (EC) No 1272/2008 s of 5-chloro-2-methyl-2H-isothiaz sothiazol-3-one (3:1), May produc (EU) No 528/2012 mass of 5-chloro-2-methyl-2H-iso	zol-3-one and ce an allergic reaction. othiazol-3-one and
E-mail a person i for this 5 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro 2.2. Label ele Labelling EUH208 Suppleme Labelling Contain 2-methy 2.3. Other ha No spec SECTION 3: 3.2. Mixtures	responsible SDS ncy telepho 0)621-60-43333 : Hazards cation of the oduct is not clar coduct is not clar coduct is not clar g according 8 Contains ental information according to s a biocidal pro- yl-2H-isothiazo azards cial hazards ha cial hazards ha	identificat identificat substance substance substance substance substance reaction mass 2-methyl-2H-it ation o regulation (oduct: reaction id-3-one (3:1) ave to be mention ition/inform	ion or mixture bus in accordance with Regulation on (EC) No 1272/2008 s of 5-chloro-2-methyl-2H-isothiaz sothiazol-3-one (3:1), May produc (EU) No 528/2012 mass of 5-chloro-2-methyl-2H-iso	zol-3-one and ce an allergic reaction. othiazol-3-one and
E-mail a person i for this 3 1.4. Emerger (+49) (0 SECTION 2: 2.1. Classific This pro 2.2. Label ele Labelling EUH208 Suppleme Labelling Contain 2-methy 2.3. Other ha No spec SECTION 3: 3.2. Mixtures	responsible SDS ncy telepho ()621-60-43333 Hazards ation of the oduct is not clar ements g according 8 Contains ental information according to s a biocidal pro- yl-2H-isothiazo azards cial hazards ha composi	identificat identificat e substance ssified hazardo to regulation reaction mass 2-methyl-2H-it ation o regulation (oduct: reaction id-3-one (3:1) ave to be mention ition/inform	ion or mixture bus in accordance with Regulation on (EC) No 1272/2008 s of 5-chloro-2-methyl-2H-isothiaz sothiazol-3-one (3:1), May produc (EU) No 528/2012 mass of 5-chloro-2-methyl-2H-iso	zol-3-one and ce an allergic reaction. othiazol-3-one and

rade name: Marabu Aqua P	en Mega Mash ´	12pcs MNA	A 037			Marab
		Version	2 / GE	3		Date revised: 24.01.2020
Substance number: 0145900	0000100-037	Replace	s Versio	on: 1/GB		Print date: 12.05.23
EINECS no.	203-473-3					
Registration no.	01-211945681	6-28				
Concentration	>=	1	<	10	%	
Classification (Regula		272/2008)	11200			
	Acute Tox. 4 STOT RE 2		H302 H373			
reaction mass of 5-ch	loro-2-methyl-2	H-isothia:	zol-3-on	e and 2-m	ethyl-2H	-isothiazol-3-one (3:1)
CAS No. Concentration	55965-84-9	0.001	_	0.0015	0/	
Classification (Regula	>= ation (EC) No. 12	0,001	<	0,0015	%	
Classification (Regul	Acute Tox. 2		H330			
	Aquatic Chron	ic 1	H410			
	Aquatic Acute		H400			
	Skin Sens. 1A		H317			
	Skin Corr. 1C		H314			
	Acute Tox. 2 Acute Tox. 3		H310 H301			
	Eye Dam. 1		H318			
Concentration limits (
	Skin Corr. 1C	H314				
	Eye Irrit. 2 Skin Irrit. 2	H319 H315		0,06 < 0,6 0,06 < 0,6		
	Skin Sens. 1	H317		0,00 < 0,0		
	Aquatic Acute			= 100		
	Aquatic Chron	ic H410) M =	= 100		
	1 Eye Dam. 1	H318		0,6 %		
		11510	, /-	0,0 /8		
ECTION 4: First aid						
.1. Description of first	aid measure	S				
After skin contact						
Wash with plenty of v	water and soap. I	Do NOT us	se solvei	nts or thinn	iers.	
After eye contact						
Separate eyelids, wa	sh the eyes thore	oughly with	n water ((15 min.). lı	n case of	irritation consult an oculist.
After ingestion						
Rinse mouth thoroug medical treatment.	hly with water. If	larger amo	ounts ar	e swallowe	ed or in th	e event of symptoms take
I.2. Most important syr Until now no symptor			both a	cute and	l delaye	ed
.3. Indication of any in			ention	and spe	cial tre	atment needed
Hints for the physicia						
Treat symptomaticall						
ECTION 5: Firefight	<u>ting measu</u>	res				
		-				
	lia					
5.1. Extinguishing med						
5.1. Extinguishing med Suitable extinguishir Carbon dioxide, Foar	ng media					

ASDS for #24547 - MARB AQUA PEN GR			06		Page * *
sarety data sheet in accordance with re	guiation	(EC) NO 1507/20			
rade name: Marabu Aqua Pen Mega Ma	ash 12pcs	s MNA 037			Marabi
	Ve	ersion: 2/GB		Date revised:	
Substance number: 0145900000100-037	7 Re	eplaces Version: 1	I / GB	Print da	ate: 12.05.23
In the event of fire the following ca black smoke	an be rele	eased: Carbon mo	noxide (CO);	Carbon dioxide (CO2	?); dense
5.3. Advice for firefighters					
Other information					
Collect contaminated fire-fighting	water se	parately, must not	be discharge	d into the drains.	
ECTION 6: Accidental relea	<u>se me</u>	<u>asures</u>			
5.1. Personal precautions, protec No particular measures required.	ctive ec	quipment and e	emergency	/ procedures	
5.2. Environmental precautions No particular measures required.					
5.3. Methods and material for con Clean preferably with a detergent			ng up		
6.4. Reference to other sections					
Information regarding Safe handli see Section 8. Information regard				personal protective r	neasures,
ECTION 7: Handling and sto	orage				
7.1. Precautions for safe handlin	g				
Advice on safe handling					
Avoid skin and eye contact. Smol	king, eatii	ng and drinking sha	all be prohibi	ted in application area	a.
Advice on protection against fi	re and e	explosion			
No special measures required.					
Classification of fires / tempera	ture cla	iss / Ignition gro	oup / Dust e	explosion class	
Temperature class T2					
7.2. Conditions for safe storage,	includi	ing any incomp	oatibilities		
Requirements for storage room	ns and v	vessels			
Store in frostfree conditions.					
7.3. Specific end use(s) Paint					
ECTION 8: Exposure contro	alc/nor	conclarator	tion		
3.1. Control parameters	ns/per	sonal protec	,11011		
Exposure limit values					
Ethanediol					
	EH40				
21 -	WEL				
Value Skin resorption / sensibilisation: S	10 Sk [.] 2011	mg/m³			
Ethanediol	. 2011				
	EU				
	52	mg/m³	20	ppm(V)	
Short term exposure limit	104 Skip: Pr	mg/m ³ emarks: 2000/39/E	40	ppm(V)	
Skin recorption / consibilization C	NIII, RO	emarks. 2000/39/E	9		
Skin resorption / sensibilisation: S					
Glycerol	EH40				
Glycerol	EH40				

with regulation (EC) NO 1907/2006	
ega Mash 12pcs MNA 037	
	Date revised: 24.01.2020
00-037 Replaces Version: 1 / GB	Print date: 12.05.23
WEL	
10 mg/m³	
: Levels (DNEL/DMEL)	
5	
35	mg/m³
Derived No Effect Level (DNEL)	
Worker	
Long term	
Systemic effects	
106	mg/kg
Derived No Effect Level (DNEL)	
Consumer	
Long term	
inhalative	
Local effects	
7	mg/m³
Derived No Effect Level (DNEL)	
dermal	
Systemic effects	
53	mg/kg
entration (PNEC)	
PNEC	
10	mg/l
PNEC	
1	mg/l
PNEC	
10	mg/l
Sewage treatment plant (STP) 199,5	mg/l
	mg/kg
	WEL 10 mg/m ³ wither control parameters. Levels (DNEL/DMEL) Derived No Effect Level (DNEL) Worker Long term inhalative Local effects 35 Derived No Effect Level (DNEL) Worker Long term dermal Systemic effects 106 Derived No Effect Level (DNEL) Consumer Long term inhalative Local effects 7 Derived No Effect Level (DNEL) Consumer Long term inhalative Local effects 53 entration (PNEC) PNEC Freshwater 1 PNEC Water (intermittent release) 10 PNEC Sewage treatment plant (STP)

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arety data sneet li	n accordance with re	guiation (EC) N	u 1907/2	000	
ade name: Marab	u Aqua Pen Mega Ma	sh 12pcs MNA 0	37		
		Version:	2 / GB		Date revised: 24.01.2020
ubstance number:	0145900000100-037	Replaces V	Version:	1 / GB	Print date: 12.05.23
Type of valu	Je F	PNEC			
Type Concentratio	Ν	Marine sediment 3,7			mg/kg
Type of valu Type		PNEC Soil			
Concentratio	on	1,53			mg/kg
.2. Exposure c	ontrols				
Exposure co	ntrols				
	equate ventilation.				
Respiratory					
Not necessa					
Hand protect					
Not necessa					
individual or For prolonge Material thic Breakthroug The breakth The instruct replacemen Gloves shou Always ensu The perform maintenanc Barrier crea once expose Eye protectio Not necessa	combination of chemi ed or repeated handlin kness > gh time < rough time must be gr ions and information p t must be followed. uld be replaced regular une that gloves are free hance or effectiveness e. ms may help to protect ure has occurred. on ary. tion	cals. Ig nitrile rubber g 0,5 m 30 m reater than the el rovided by the g rly and if there is a from defects ar of the glove may	loves with m nd use tin love mar any sigr nd that th y be redu	th textile und me of the pro- nufacturer or n of damage ey are store aced by phys	n use, storage, maintenance and to the glove material.
Not applicat	Jie.				
ECTION 9: PI	nysical and che	emical prop	erties		
.1. Information	on basic physica	I and chemic	al pro	oerties	
Physical stat		quid	_		
Colour		oloured			
Odour		odourless			
Melting point	t				
Remarks	r	not determined			
Freezing poin	nt				
Remarks		not determined			
	or initial boiling po	oint and boilin	g range	•	
Boiling point	• •	appr. 100	5 3		°C
Boiling point Value	6				
• •	č	1.013	hPa		
Value			hPa		
Value Pressure	L	1.013	hPa		

Frade name: Marabu Aqua Pen Mega	a Mash 12pcs MNA 037 Version: 2 / GB		Marabu Date revised: 24.01.2020
Substance number: 0145900000100		3	Print date: 12.05.23
Upper and lower explosive	limits		
Lower explosion limit	appr. 3,2	%(V)	
Upper explosion limit Source	appr. 53 Literature value	%(V)	
Flash point			
Remarks	Not applicable		
Ignition temperature			
Value Source	appr. 410 Literature value	°C	
Viscosity			
Remarks Remarks	not determined		
Vapour pressure			
Value	appr. 23	hPa	
Temperature Method	20 °C Value taken from the literature		
Density and/or relative dense	sity		
Remarks	not determined		
Relative vapour density			
Remarks	not determined		
9.2. Other information			
Odour threshold			
Remarks	No data available		
Evaporation rate (ether = 1) Remarks	: not determined		
Solubility in water Remarks	miscible		
Other information			
None known			
SECTION 10: Stability and	reactivity		
10.1. Reactivity None			
10.2. Chemical stability No hazardous reactions know	<i>i</i> n.		
10.3. Possibility of hazardous No hazardous reactions know			
10.4. Conditions to avoid No hazardous reactions know	m.		
10.5. Incompatible materials None			
10.6. Hazardous decomposition No hazardous decomposition			

Safety data sheet in accor	C		0112000	
rade name: Marabu Aqua	Pen Mega Mash			Marab
		Version: 2/0	-	Date revised: 24.01.2020
Substance number: 01459	00000100-037	Replaces Vers	sion: 1/GB	Print date: 12.05.23
11.1 Information on ha	azard classes	as defined in	Regulation (E	C) No 1272/2008
Acute oral toxicity		as defined in	Regulation (E	C) NO 1272/2000
Remarks	Based	on available data	. the classification of	criteria are not met.
Acute oral toxicity			,	
Ethanediol	,			
Species	rat			
LD50		7712	mg/ł	<g< td=""></g<>
Acute dermal toxici	ty			
Remarks	Based	on available data	, the classification of	criteria are not met.
Acute dermal toxici	ty (Componen	ts)		
Ethanediol				
Species	rabbit			
LD50	>	9530	mg/ł	<g< td=""></g<>
Acute inhalational t	oxicity			
Remarks	Based	on available data	, the classification of	criteria are not met.
Skin corrosion/irrita	ation			
Remarks	Based	on available data	, the classification of	criteria are not met.
Serious eye damag	e/irritation			
Remarks	Based	on available data	, the classification of	criteria are not met.
Sensitization				
Remarks	Based	on available data	, the classification of	criteria are not met.
Mutagenicity				
Remarks	Based	on available data	, the classification of	criteria are not met.
Reproductive toxic	ty			
Remarks	Based	on available data	, the classification of	criteria are not met.
Carcinogenicity				
Remarks	Based	on available data	, the classification of	criteria are not met.
Specific Target Org	an Toxicity (S	ΓΟΤ)		
Single exposure				
Remarks	Based	on available data	, the classification of	criteria are not met.
Repeated exposur	e			
Remarks	Based	on available data	, the classification of	criteria are not met.
Aspiration hazard				
Based on available	data, the classific	cation criteria are	not met.	
Experience in pract	ice			
limit may result in a and adverse effects dizziness, fatigue, n Solvents may cause contact with the mix dermatitis and abso reversible damage. known, delayed and	dverse health effe on kidney, liver a nuscular weaknes some of the abo ture may cause r rption through the Ingestion may ca I immediate effec	ects such as mucc and central nervou ss, drowsiness an ove effects by abs emoval of natural e skin. The liquid suse nausea, diarr tts and also chron	bus membrane and us system. Sympto d in extreme cases orption through the fat from the skin re splashed in the eye rhoea and vomiting ic effects of compo	stated occupational exposure respiratory system irritation ms and signs include headache, s, loss of consciousness. e skin. Repeated or prolonged esulting in non-allergic contact es may cause irritation and h. This takes into account, where nents from short-term and
Iong-term exposure	pv oral, inhalatio	n and dermal rout	tes of exposure and	a eye contact.

The mixture has been assessed following the additivity method of the CLP Regulation (EC) No

MSDS for #24547 - MARB AQUA P		v					Page ***
Safety data sheet in accordance	with regula	^ ation (EC)	No 1907/2	006			
			0.007				
Trade name: Marabu Aqua Pen Me	ega Masn 1	•					Marabu
			2/GB			Date revised:	
Substance number: 01459000001	00-037	Replace	es Version:	1 / GB		Print d	ate: 12.05.23
1272/2008 and classified for	or toxicolog	ical hazar	ds accordin	igly.			
SECTION 12: Ecological	informa	ation					
12.1. Toxicity							
General information							
There are no data available mixture has been assessed and is not classified as dan environment. See section 3	t following t gerous for	the summ the enviro	ation metho	od of the	CLP Regula	tion (EC) No 1	272/2008
Fish toxicity (Components	s)						
Ethanediol							
Species	Fathead	l minnow (Pimephale	s promel	las)		
LC50		8050			mg/l		
Duration of exposure		96	h				<i></i>
reaction mass of 5-chloro-2			zol-3-one a corhynchus			thiazol-3-one	(3:1)
Species LC50		0,188	comynenus	mykiss)	mg/l		
Duration of exposure		96	h		iiig/i		
Daphnia toxicity (Compor	nents)						
Ethanediol							
Species	Daphnia	magna					
		10000			mg/l		
Duration of exposure		24	h				
reaction mass of 5-chloro-2			zol-3-one a	ind 2-me	ethyl-2H-iso	thiazol-3-one	(3:1)
Species EC50	Daphnia	i magna 0,126			ma/l		
Duration of exposure		0,120 48	h		mg/l		
Algae toxicity (Componer		10					
reaction mass of 5-chloro-2	-		zol-2-ono c	nd 2-ma	sthyl_24_ico	hiazol-2-ono	(2.1)
Species			icornutum		ettiyi-211-150	111a201-3-011e	(3.1)
EC50		0,027			mg/l		
Duration of exposure		72	h		-		
12.2. Persistence and degra	dability						
General information	,						
There are no data available	on the mix	dure itself					
12.3. Bioaccumulative poter	ntial						
General information							
There are no data available	e on the mix	kture itself	-				
12.4. Mobility in soil							
General information							
There are no data available	on the mix	kture itself	-				
12.5. Results of PBT and vP	VR acco	semont					
General information	vD d336	Sament					
		turo itorit					
There are no data available	e on the mix	kture itsen	-				
	e on the mix		-				
There are no data available	e on the mix	cure itsen	-				

	QUA PEN GRAPIX	- (EC) No 4007/2	006	Page
Safety data sheet in accord	ance with regulation	n (EC) NO 1907/2	005	
rade name: Marabu Aqua F	'en Mega Mash 12pc	s MNA 037		
	Ve	ersion: 2/GB		Date revised: 24.01.202
Substance number: 014590	0000100-037 R	eplaces Version:	1 / GB	Print date: 12.05.2
SECTION 13: Dispos	al considerati	ons		
13.1. Waste treatment i				
Disposal recommend	-			
Do not allow to enter Dispose of waste acc				
Dispose of as hazard		legislation.		
Disposal recommen	dations for packa	ging		
Packaging that cannot	ot be cleaned should	be disposed off a	s product waste.	
Completely emptied			s product waste.	
Completely emptied	packagings can be g	iven for recycling.	s product waste.	
Completely emptied	packagings can be g	iven for recycling.	s product waste.	
Completely emptied	packagings can be g	iven fo ^r recycling. p <u>n</u> R/RID Mar	ine transport DG/GGVSee	Air transport ICAO/IATA
Completely emptied	packagings can be g port informatio Land transport AD	iven for recycling. P <u>n</u> R/RID Mar IM	ine transport DG/GGVSee	ICAO/IATA
Completely emptied	packagings can be gi port informatio Land transport AD The product does not cor hazardous substance i	R/RID Mar IM Martitute a The product	ine transport DG/GGVSee ct does not constitute a us substance in sea	ICAO/IATA The product does not constitute a hazardous substance in air
Completely emptied	packagings can be gint information Land transport AD	R/RID Mar IM Martitute a The product	ine transport DG/GGVSee ct does not constitute a	ICAO/IATA The product does not constitute

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-

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no

Information for all modes of transport	
•	

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

-

0

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.3. Transport hazard

14.4. Packing group

Transport category

14.5. Environmental hazards

class(es)

Label

Subsidiary risk

14.7 Maritime transport in bulk according to IMO instruments

no

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

voc

VOC (EU)

%

5

Item Numbers: 24547-1009

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ade name: Marabu Aqua Pen	Mega Mash 12pcs	MNA 037		
	Vers	sion: 2/GB		Date revised: 24.01.2020
ubstance number: 014590000	0100-037 Rep	laces Version:	1 / GB	Print date: 12.05.23
Other information				
The product does not co	ntain substances of	very high cond	cern (SVHC).	
5.2. Chemical safety ass				
For this preparation a ch	emical safety asses	ssment has not	been carried or	ut.
ECTION 16: Other inf	ormation			
Hazard statements liste	-			
H301	Toxic if swalld			
H302	Harmful if swa			
H310	Fatal in conta			
H314			nd eye damage.	
H317 H318		allergic skin re us eve damage		
H330	Fatal if inhale	, ,	•	
H373			s through prolo	nged or repeated exposure.
H400	Very toxic to a		e uneugn preie	nged er repeated expected.
H410			long lasting effe	ects.
CLP categories listed in		•	0 0	
Acute Tox. 2	Acute toxicity,	Category 2		
Acute Tox. 3	Acute toxicity,			
Acute Tox. 4	Acute toxicity,			
Aquatic Acute 1	Hazardous to	the aquatic env	vironment, acute	e, Category 1
Aquatic Chronic 1	Hazardous to	the aquatic env	vironment, chro	nic, Category 1
Eye Dam. 1		amage, Catego	ory 1	
Skin Corr. 1C		, Category 1C		
Skin Sens. 1A		tion, Category		
STOT RE 2		t organ toxicity	- repeated expo	osure, Category 2
Supplemental informati				
				sheet are marked with: ***
This information is base guarantee for any specif				
The information in this S				
legislation.	aloty Data Officer 15		state of	knowledge and current
	nealth. safetv and e	nvironmental a	spects of the pr	roduct and should not be
construed as any guarar				
The product should not I	be used for purpose	s other than the		ection 1 without first referring
to the supplier and obtai				
				control, the user is responsible
for ensuring that the req				
				user's own assessment of
workplace risks, as requ	ired by other nealth	and safety legi	slation.	

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	UA PEN GRAPIX	(Page 11 of 7
Safety data sheet in accorda	ince with regula	tion (EC) No 1907/2	006	
Trade name: Marabu Aqua Pe	en Mega Mash 1	2pcs MNA 045		
	0	Version: 2 / GB		Date revised: 24.01.2020
Substance number: 0145900	000100-045	Replaces Version:	1 / GB	Print date: 12.05.23
SECTION 1: Identification company/undertaking		substance/mi	xture and of	<u>the</u>
	<u>9</u>			
1.1. Product identifier Marabu Aqua Pen Me	aa Mash 12ncs I	MNA 045		
1.2. Relevant identified			ture and uses	advised against
Use of the substance/pi				adviscu agamst
Paint				
Identified Uses	_			
SU21 PC9a		s: Private households aints, thinners, paint		= consumers)
1.3. Details of the suppl	ier of the safe	ety data sheet		
Address/Manufacture	-			
Marabu GmbH & Co. Asperger Strasse 4	ĸĠ			
71732 Tamm				
Germany Telephone no.	+49-7141/691-0	0		
Information provided	Department pro	oduct safety		
by / telephone E-mail address of	PRSI@marabu	.com		
person responsible for this SDS				
	no numbor			
	ne number			
1.4. Emergency telepho (+49) (0)621-60-4333	3			
		<u>on</u>		
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the	identifications substance of	or mixture		
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla	identifications substance of	or mixture	Regulation (EC) N	o 1272/2008.
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements	identification e substance of assified hazardou	or mixture s in accordance with		o 1272/2008.
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according	identification e substance of ssified hazardou	or mixture s in accordance with n (EC) No 1272/2	008	
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements	identification e substance of assified hazardou g to regulation reaction mass of	or mixture s in accordance with n (EC) No 1272/2	008 2H-isothiazol-3-on	e and
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according	identification e substance of lassified hazardou g to regulation reaction mass of 2-methyl-2H-iso	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl-	008 2H-isothiazol-3-on	e and
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains	identification e substance of assified hazardou g to regulation reaction mass of 2-methyl-2H-iso ation	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1),	008 2H-isothiazol-3-on	e and
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental information	identification e substance of assified hazardou g to regulation 2-methyl-2H-iso ation to regulation (E roduct: reaction m	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), EU) No 528/2012	008 2H-isothiazol-3-on May produce an al	e and lergic reaction.
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental information Labelling according to Contains a biocidal pr 2-methyl-2H-isothiazo 2.3. Other hazards	identification e substance of assified hazardou g to regulation reaction mass of 2-methyl-2H-iso ation to regulation (E oduct: reaction mol- 3-one (3:1)	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), EU) No 528/2012 nass of 5-chloro-2-me	008 2H-isothiazol-3-on May produce an al	e and lergic reaction.
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental information Labelling according to Contains a biocidal pr 2-methyl-2H-isothiazo	identification e substance of assified hazardou g to regulation reaction mass of 2-methyl-2H-iso ation to regulation (E oduct: reaction mol- 3-one (3:1)	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), EU) No 528/2012 nass of 5-chloro-2-me	008 2H-isothiazol-3-on May produce an al	e and lergic reaction.
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental information Labelling according to Contains a biocidal pr 2-methyl-2H-isothiazo 2.3. Other hazards	identification e substance of assified hazardou g to regulation reaction mass of 2-methyl-2H-iso ation to regulation (E oduct: reaction m ol-3-one (3:1) ave to be mention	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), EU) No 528/2012 nass of 5-chloro-2-me ned.	008 2H-isothiazol-3-on May produce an al ethyl-2H-isothiazol-	e and lergic reaction.
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental information Labelling according to Contains a biocidal pr 2-methyl-2H-isothiazo 2.3. Other hazards No special hazards has	identification e substance of assified hazardou g to regulation reaction mass of 2-methyl-2H-iso ation to regulation (E oduct: reaction m ol-3-one (3:1) ave to be mention	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), EU) No 528/2012 nass of 5-chloro-2-me ned.	008 2H-isothiazol-3-on May produce an al ethyl-2H-isothiazol-	e and lergic reaction.
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental information Labelling according to Contains a biocidal pro- 2-methyl-2H-isothiazon 2.3. Other hazards No special hazards has SECTION 3: Compose	identification e substance of assified hazardou g to regulation reaction mass of 2-methyl-2H-iso ation to regulation (E oduct: reaction m ol-3-one (3:1) ave to be mention ition/inform	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), EU) No 528/2012 nass of 5-chloro-2-me ned.	008 2H-isothiazol-3-on May produce an al ethyl-2H-isothiazol-	e and lergic reaction.
(+49) (0)621-60-43333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental information Labelling according to Contains a biocidal pr 2-methyl-2H-isothiazo 2.3. Other hazards No special hazards has SECTION 3: Compos 3.2. Mixtures	identification e substance of assified hazardou g to regulation reaction mass of 2-methyl-2H-iso ation to regulation (E oduct: reaction m ol-3-one (3:1) ave to be mention ition/inform	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), EU) No 528/2012 nass of 5-chloro-2-me ned.	008 2H-isothiazol-3-on May produce an al ethyl-2H-isothiazol-	e and lergic reaction.

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rade name: Marabu Aqua F	-	Version:	2 / GE			Date revised: 24.01.2020
Substance number: 014590	0000100-045	Replace	s versio	on: 1/GB		Print date: 12.05.23
EINECS no. Registration no. Concentration Classification (Regula	203-473-3 01-211945681 >= ation (EC) No. 12 Acute Tox. 4 STOT RE 2	1	< H302 H373	10	%	
reaction mass of 5-ch CAS No.	loro-2-methyl-2 55965-84-9	H-isothiaz	ol-3-on	e and 2-m	ethyl-2H	-isothiazol-3-one (3:1)
Concentration Classification (Regula	>=	ic 1	< H330 H410 H400 H317 H314 H310 H301 H318	0,0015	%	
	Skin Corr. 1C Eye Irrit. 2 Skin Irrit. 2 Skin Sens. 1 Aquatic Acute Aquatic Chron 1 Eye Dam. 1		>= >= M = M =	0,6 0,06 < 0,6 0,06 < 0,6 0,0015 = 100 = 100 0,6 %		
ECTION 4: First aid						
1.1. Description of first After skin contact	aid measure	S				
Wash with plenty of w After eye contact Separate eyelids, wa After ingestion	sh the eyes thore	oughly with	water (15 min.). Ir	n case of	irritation consult an oculist. e event of symptoms take
1.2. Most important syr Until now no symptor		effects, I	ooth a	cute and	delaye	d
4.3. Indication of any in Hints for the physicia Treat symptomaticall	nmediate me an / treatment		ention	and spe	cial tre	atment needed
ECTION 5: Firefight		res				
5.1. Extinguishing med Suitable extinguishir						
Carbon dioxide, Foar	- Canal 14/-1-					

Page 2(10)

/ISDS for #24547 - MARB AQUA PEN GRAP Safety data sheet in accordance with regul	IX ation (EC) No	1907/2006		Page
rade name: Marabu Aqua Pen Mega Mash	•			Marabi Marabi
Culetone cumber 014500000100.045	Version: 2		CP	Date revised: 24.01.2020 Print date: 12.05.23
Substance number: 0145900000100-045	Replaces v	ersion: 1/	GB	Finit date. 12.05.23
In the event of fire the following can b black smoke	e released: Ca	arbon mono:	xide (CO);	Carbon dioxide (CO2); dense
5.3. Advice for firefighters				
Other information				
Collect contaminated fire-fighting wat	er separately,	must not be	discharge	d into the drains.
ECTION 6: Accidental release	measures	<u>s</u>		
6.1. Personal precautions, protectiv No particular measures required.	e equipme	nt and em	ergency	v procedures
6.2. Environmental precautions No particular measures required.				
6.3. Methods and material for conta Clean preferably with a detergent - av			ир	
6.4. Reference to other sections Information regarding Safe handling, see Section 8. Information regarding				personal protective measures,
SECTION 7: Handling and stora	ige			
7.1. Precautions for safe handling				
Advice on safe handling				
Avoid skin and eye contact. Smoking	, eating and dr	inking shall	be prohibit	ed in application area.
Advice on protection against fire a	ind explosio	n		
No special measures required.				
Classification of fires / temperature	e class / Ign	ition group	o / Dust e	xplosion class
7.2. Conditions for safe storage, inc	luding any	incomna	tihilitios	
Requirements for storage rooms a Store in frostfree conditions.		meompa	tionities	
7.3. Specific end use(s)				
Paint				
SECTION 8: Exposure controls/	/norconal	protocti	on	
	personal	protecti	<u>011</u>	
8.1. Control parameters Exposure limit values				
Ethanediol				
List EH4	0			
Type WEI				
Value 10 Skip recorption / consibilisation: Sk: 2	mg/m ³			
Skin resorption / sensibilisation: Sk: 2				
Ethanediol List EU				
	mg/m³		20	ppm(V)
Value 52	mg/m³		40	ppm(V)
Short term exposure limit 104				
Short term exposure limit 104 Skin resorption / sensibilisation: Skin;	Remarks: 2	2000/39/EG		
Short term exposure limit 104 Skin resorption / sensibilisation: Skin; Glycerol		2000/39/EG		
Short term exposure limit 104 Skin resorption / sensibilisation: Skin;				

Sarety data sneet in accordance	with regulation (EC) No 1907/2006	
rade name: Marabu Aqua Pen Me	ega Mash 12pcs MNA 045	
	Version: 2/GB	Date revised: 24.01.2020
Substance number: 01459000001	00-045 Replaces Version: 1 / GB	Print date: 12.05.23
Туре	WEL	
Value Status: 2011	10 mg/m ³	
Other information		
There are not known any fu	•	
Derived No/Minimal Effect	t Levels (DNEL/DMEL)	
Ethanediol		
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure Mode of action	inhalative Local effects	
Concentration	35	mg/m³
Concentration		ing/in-
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	<i>"</i>
Concentration	106	mg/kg
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	7	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	53	mg/kg
Predicted No Effect Conc	entration (PNEC)	
Ethanediol		
Type of value	PNEC	
Туре	Freshwater	
Concentration	10	mg/l
Type of value	PNEC	
Туре	Saltwater	
Concentration	1	mg/l
Type of value	PNEC	
Туре	Water (intermittent release)	
Concentration	10	mg/l
Type of value	PNEC	
Туре	Sewage treatment plant (STP)	
Concentration	199,5	mg/l
Type of value	PNEC	
Туре	Freshwater sediment	
Concentration	37	mg/kg

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Trade name: Marabu Aqua Pen Mega Mash 12pcs MNA 045 Version: 2 / 26 Date revised: 24.01.2 Substance number: 0145900000100-045 Replaces Version: 1 / GB Print date: 12.03 Type of value PNEC Type of value PNEC The recessary. Breakthrough time must be greater than the ord use time of the product. The heakthrough time must be greater than the end use time of the product. The heakthrough time must be greater than the end use time of the product. The heakthrough time point PNE of the glove manufacturer or use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are refer from defects and that they are stored and used correctly. Always ensure that gloves are refer from defects and that hey are stored and used correctly. Always ensure that gloves are refer from defects and that hey are stored and used correctly. Always ensure that gloves are refer from defects and that hey are stored and used correctly.		n accordance with	•					
Substance number: 0.14590000100-045 Replaces Version: 1 / GB Print date: 12.05 Type of value PNEC 3,7 mg/kg Type of value PNEC mg/kg Type of value PNEC mg/kg Type of value PNEC mg/kg Type of value Soil mg/kg Exposure controls Provide adequate ventilation. Respiratory protection Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrife rubber gloves with textile undergloves are required. Material thickness > 0.5 Material thickness > 0.5 mm Breakthrough time must be greater than the end use time of the product. The breakthrough time must be greater than the are slowed and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance and replacement mark gloves are free from defects and that they are stored and used correctly. At ways ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams ma	rade name: Marab	ou Aqua Pen Mega N						/ Marab
Type of value PNEC Soli Concentration Concentration 1,53 movide adequate ventilation. Respiratory protection Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > 0.5 mm Breakthrough time < 30 min The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Eye protection Not applicable. SECTION 9: Physical and chemical properties Ph								
Type Marine sediment 3,7 mg/kg Type of value PNEC Type Soil Concentration 1,53 mg/kg 8.2. Exposure controls Provide adequate ventilation. Respiratory protection Not necessary. Hand protection Not necessary. In case of intensive contact wear protective gloves. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness 0,5 Breakthrough time < 3.0 min min The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Eye protection Not necessary.	Substance number:	0145900000100-0	45	Replaces	Version:	1 / GB	Print date: 12.0)5.23
Type Marine sediment 3.7 mg/kg Type of value PNEC Soil Soil Concentration 1.53 mg/kg mg/kg 3.2. Exposure controls mg/kg Provide adequate ventilation. Respiratory protection Not neccessary. Not neccessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness 0.5 mm Breakthrough time < 30	Type of yalı		PNEC					
Type of value PNEC Type Soil Concentration 1.53 movide adequate ventilation. Respiratory protection Not necessary. Hand protection Not necessary. Hand protection Not necessary. Breakthrough time is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > 0.5 Breakthrough time be greater than the end use time of the product. The research of the replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Eye protection Not applicable. ECTION 9: Physical and chemical properties Physical state liquid Colour coloured Odour coloured Odour			-	sediment				
Type Soil Concentration 1,53 mg/kg state State State	Concentrati	on		3,7			mg/kg	
Concentration 1,53 mg/kg c2. Exposure controls Exposure controls Provide adequate ventilation. Respiratory protection Not necessary. Hand protection Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness 0.5 Breakthrough time < 30	Type of valu	Je	PNEC					
5.2. Exposure controls Exposure controls Provide adequate ventilation. Respiratory protection Not necessary. Hand protection Not necessary. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > 0,5 mm Breakthrough time < 30 min			Soil	. = -				
Exposure controls Provide adequate ventilation. Respiratory protection Not necessary. Hand protection Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > 0.5 mm Breakthrough time <	Concentrati	on		1,53			mg/kg	
Provide adequate ventilation. Respiratory protection Not necessary. Hand protection Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > Breakthrough time <	.2. Exposure c	ontrols						
Respiratory protection Not necessary. Hand protection Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling infile rubber gloves with textile undergloves are required. Material thickness > 0,5 mm Breakthrough time must be greater than the end use time of the product. The breakthrough time must be greater than the end use time of the product. The breakthrough time are serviced by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Eye protection Not necessary. Body protection Not applicable. Information on basic physical and chemical properties Physical state liquid Colour coloured odourless Melting point Remarks not determined Freezing point Remarks not determined Boiling point or initial boiling point and boiling range Value appr. 100 °C	-							
Not necessary. Hand protection Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > 0,5 mm Breakthrough time < 30 min The breakthrough time use be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrie creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Eye protection Not applicable. ECTION 9: Physical and chemical properties Physical state liquid Colour coloured Odour coloured Odour coloured Odour coloured Physical state liquid Remarks not determined Freezing point Remarks not determined Physical biling point and boiling range Value appr. 100 °C	Provide ade	equate ventilation.						
Hand protection Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > Breakthrough time <	Respiratory	protection						
Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > 0,5 mm Breakthrough time must be greater than the end use time of the product. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Eye protection Not applicable. ECTION 9: Physical and chemical properties Physical state Ilquid Coloured Odour odourless Melting point Remarks not determined Freezing point Remarks not determined Boiling point or initial boiling point and boiling range Value appr. 100 °C Pressure 1.013 hPa	Not necess	ary.						
Not necessary. In case of intensive contact wear protective gloves. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required. Material thickness > 0,5 mm Breakthrough time must be greater than the end use time of the product. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Eye protection Not applicable. ECTION 9: Physical and chemical properties Physical state Ilquid Coloured Odour odourless Melting point Remarks not determined Freezing point Remarks not determined Boiling point or initial boiling point and boiling range Value appr. 100 °C Pressure 1.013 hPa	Hand protect	tion						
The breaktfrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Eye protection Not necessary. Body protection Not applicable. ECTION 9: Physical and chemical properties Physical state liquid Colour coloured Odour odourless Melting point Remarks not determined Freezing point Remarks not determined Boiling point or initial boiling point and boiling range Value appr. 100 °C	In case of ir There is no individual or For prolong Material thio	ntensive contact weat one glove material of r combination of che led or repeated hand ckness >	or combi micals. dling nitri 0,	nation of n le rubber ç 5 n	naterials gloves wi nm	_	-	
Eye protection Not necessary. Body protection Not applicable. ECTION 9: Physical and chemical properties Physical state Iiquid Colour Coloured Odour odourless Melting point Remarks Remarks not determined Freezing point Remarks Paile Value Value Value Value Pressure 1.013	The instruct replacemen Gloves shou Always ensu The perform maintenanc Barrier crea	tions and information at must be followed. uld be replaced regu ure that gloves are f nance or effectivene ce. ams may help to prof	n provide ularly and ree from ss of the	ed by the g d if there is defects a glove ma	love mar any sigr nd that th y be redu	nufacturer n of dama ney are sto uced by pl	r on use, storage, maintenance and uge to the glove material. ored and used correctly. hysical/ chemical damage and poor	
Not necessary. Body protection Not applicable. ECTION 9: Physical and chemical properties A.1. Information on basic physical and chemical properties Physical state liquid Colour coloured Odour odourless Melting point Remarks not determined Freezing point Remarks not determined Boiling point or initial boiling point and boiling range Value appr. 100 °C Pressure 1.013 hPa								
Not applicable. ECTION 9: Physical and chemical properties Information on basic physical and chemical properties Physical state liquid Colour coloured Odour odourless Melting point remarks Remarks not determined Freezing point remarks Remarks not determined Boiling point or initial boiling point and boiling range °C Value appr. 100 °C Pressure 1.013 hPa								
Not applicable. ECTION 9: Physical and chemical properties Information on basic physical and chemical properties Physical state liquid Colour coloured Odour odourless Melting point remarks Remarks not determined Freezing point remarks Remarks not determined Boiling point or initial boiling point and boiling range °C Value appr. 100 °C Pressure 1.013 hPa	Body protect	tion						
Physical state liquid Colour coloured Odour odourless Melting point Remarks not determined Freezing point Remarks not determined Boiling point or initial boiling range Value appr. 100 °C Pressure 1.013 hPa								
A.1. Information on basic physical and chemical properties Physical state liquid Colour coloured Odour odourless Melting point Remarks not determined Freezing point Remarks not determined Boiling point or initial boiling point or initial boiling point ange Value appr. 100 °C Pressure 1.013 hPa		hysical and c	homic	al pror	ortios			
Physical state liquid Colour coloured Odour odourless Melting point						-		
Colour coloured Odour odourless Melting point Remarks Remarks not determined Freezing point Remarks Remarks not determined Boiling point or initial boiling point and boiling range Value appr. 100 °C Pressure 1.013 hPa °C						portioo		
Melting point Remarks not determined Freezing point Remarks not determined Boiling point or initial boiling point and boiling range Value appr. 100 °C Pressure 1.013 hPa °C			•	ed				
Remarks not determined Freezing point not determined Remarks not determined Boiling point or initial boiling point and boiling range °C Value appr. 100 °C Pressure 1.013 hPa	Coloui		odourle	ess				
Remarks not determined Freezing point not determined Remarks not determined Boiling point or initial boiling point and boiling range °C Value appr. 100 °C Pressure 1.013 hPa		t						
Freezing point Remarks not determined Boiling point or initial boiling point and boiling range Value appr. 100 °C Pressure 1.013 hPa Name Nam Name Nam N	Odour		not det	ermined				
Remarksnot determinedBoiling point or initial boiling point and boiling rangeValueappr. 100Pressure1.013	Odour Melting point							
Boiling point or initial boiling point and boiling rangeValueappr.100°CPressure1.013hPa	Odour Melting point Remarks	πτ	not det	ermined				
Value appr. 100 °C Pressure 1.013 hPa	Odour Melting poin Remarks Freezing poi	nt				è		
Pressure 1.013 hPa	Odour Melting poin Remarks Freezing poi Remarks			nd boilir				
	Odour Melting poin Remarks Freezing poi Remarks Boiling point		point a		ig range		°C	
	Odour Melting poin Remarks Freezing poin Remarks Boiling point Value		point a	100		-	°C	
Flammability	Odour Melting poin Remarks Freezing poin Remarks Boiling point Value Pressure		point a appr.	100 1.013		-	°C	

Frade name: Marabu Aqua Pen Mega	1 Mash					Marabu
		Version:				Date revised: 24.01.2020
Substance number: 0145900000100-	-045	Replaces	s Version:	1 / GB		Print date: 12.05.23
Upper and lower explosive I	imits					
Lower explosion limit	app	or. 3,2			%(V)	
Upper explosion limit	app				%(V)	
Source	Lite	rature value				
Flash point						
Remarks	Not	applicable				
Ignition temperature						
Value	app				°C	
Source	Lite	rature value				
Viscosity						
Remarks Remarks						
	not	determined				
Vapour pressure						
Value	app	or. 23 20	°C		hPa	
Temperature Method	Val	∠∪ ue taken fro	-	ature		
Density and/or relative dens						
Remarks	-	determined				
Relative vapour density	not	determined				
Remarks	not	determined				
	not	determined				
9.2. Other information						
Odour threshold						
Remarks	No	data availab	le			
Evaporation rate (ether = 1)	:					
Remarks	not	determined				
Solubility in water						
Remarks	mis	cible				
Other information						
None known						
SECTION 10: Stability and	read	<u>tivity</u> :				
10.1. Reactivity None						
10.2. Chemical stability No hazardous reactions know	n.					
10.3. Possibility of hazardous No hazardous reactions know		tions				
10.4. Conditions to avoid No hazardous reactions know	n.					
10.5. Incompatible materials None						
10.6. Hazardous decomposition No hazardous decomposition						

SDS for #24547 - MARB AQUA P a fety data sheet in accordance v	with regu	ulation (EC) No 1	907/2006	
ade name: Marabu Aqua Pen Me	ega Mash	12pcs MNA 045		
		Version: 2/0	ЭB	Date revised: 24.01.202
ubstance number: 01459000001	00-045	Replaces Vers	sion: 1/GB	Print date: 12.05.2
1.1 Information on hazard	classes	s as defined in	Regulation (E	C) No 1272/2008
Acute oral toxicity				
Remarks	Based	l on available data	, the classification	criteria are not met.
Acute oral toxicity (Comp	onents)			
Ethanediol				
Species	rat			
LD50		7712	mg/	kg
Acute dermal toxicity	_			
Remarks			, the classification	criteria are not met.
Acute dermal toxicity (Co	mponer	nts)		
Ethanediol				
Species LD50	rabbit >	9530	mg/l	ka
Acute inhalational toxicity		9000	ing/i	ry
Remarks		l on available data	the classification	criteria are not met.
Skin corrosion/irritation	Dasec			chiena are not met.
Remarks	Baser	l on available data	the classification	criteria are not met.
Serious eye damage/irrita				chiena are not met.
Remarks		l on available data	the classification	criteria are not met.
Sensitization	Dasec	i un avaliable uata		chiena are not met.
Remarks	Pagaa	l an available data	the eleccification	criteria are not met.
	Dasec	i un avaliable uata		chiena are not met.
Mutagenicity Remarks	Pagaa	l an available data	the eleccification	oritoria ara nat mat
	Dasec	i un avaliable uata		criteria are not met.
Reproductive toxicity Remarks	Basaa	l on available data	the classification	criteria are not met.
	Dasec	i un avaliable uata		chiena are not met.
Carcinogenicity Remarks	Pagaa	l an available data	the eleccification	criteria are not met.
				chiena are not met.
Specific Target Organ Tox	Cicity (S	101)		
Single exposure	-		the stars of the	
Remarks	Based	on available data	, the classification	criteria are not met.
Repeated exposure	Pages	l on available dete	the classification	criteria are not mot
Remarks	Dased	a on available uala	, เกษ เกลรริกเติลแอก	criteria are not met.
Aspiration hazard Based on available data, th	o oloooiti	cation critoria are	not mot	
	e ciassifi	cation criteria are	not met.	
Experience in practice	vonto vo		in avaaaa of the	atatad appunctional avagante
limit may result in adverse l and adverse effects on kidr dizziness, fatigue, muscula Solvents may cause some contact with the mixture ma dermatitis and absorption tl	nealth eff ney, liver r weakne of the ab ay cause nrough th on may ca liate effe	ects such as muc and central nervo ess, drowsiness ar ove effects by abs removal of natural ne skin. The liquid ause nausea, diar cts and also chron	bus membrane and us system. Sympto d in extreme cases orption through the fat from the skin re splashed in the eye rhoea and vomiting ic effects of compo	e skin. Repeated or prolonged esulting in non-allergic contact es may cause irritation and g. This takes into account, where onents from short-term and
Other information				
There are no data available	on the r	nixture itself.		
			mathed of the Cl	P Regulation (FC) No

The mixture has been assessed following the additivity method of the CLP Regulation (EC) No

/ISDS for #24547 - MARB AQUA Safety data sheet in accordance	PEN GRAPIX • with regulation (E	C) No 1907/	2006	Page 1* ~
rade name: Marabu Aqua Pen N	•			Marabu
		on: 2/GB		Date revised: 24.01.2020
Substance number: 0145900000	100-045 Repla	ces Version:	1 / GB	Print date: 12.05.23
1272/2008 and classified	for toxicological haz	ards accordi	ngly.	
ECTION 12: Ecologica	l information			
12.1. Toxicity				
General information				
There are no data availab mixture has been assess and is not classified as da	ed following the sum	mation meth		ains or water courses.The Regulation (EC) No 1272/2008
Fish toxicity (Componen	-			
Ethanediol				
Species	Fathead minnov	v (Pimephale	• • •	
LC50 Duration of exposure	8050 96	h	mg/	1
reaction mass of 5-chloro			and 2-mothyl-	2H-isothiazol-3-one (3.1)
Species	rainbow trout (C			211 130(11a201-0-011e (0.1)
LC50	0,188	-	mg/	1
Duration of exposure	96	h		
Daphnia toxicity (Compo	onents)			
Ethanediol	Dentria			
Species	Daphnia magna > 10000		mg/	1
Duration of exposure	24	h		
reaction mass of 5-chloro			and 2-methyl-	2H-isothiazol-3-one (3:1)
Species EC50	Daphnia magna 0,126		~~~~(1
Duration of exposure	48	h	mg/	I
Algae toxicity (Compone	ents)			
reaction mass of 5-chloro	-	azol-3-one	and 2-methyl-	2H-isothiazol-3-one (3:1)
Species	Selenastrum ca			
EC50	0,027		mg/	1
Duration of exposure	72	h		
12.2. Persistence and degr	adability			
General information				
There are no data availab	le on the mixture its	əlf.		
12.3. Bioaccumulative pote	ential			
General information				
There are no data availab	le on the mixture its	əlf.		
12.4. Mobility in soil				
General information				
There are no data availab	le on the mixture its	əlf.		
12.5. Results of PBT and v	PvB assessmer	t		
General information		-		
There are no data availab	le on the mixture its	elf.		
12.7. Other adverse effects				
General information				
	lo on the misture it-	alf		
There are no data availab	ie on the mixture its	.		

rade name: Marabu A	qua Pen Mega Mash	12pcs MNA 045		Marabu
		Version: 2 / GB	Date revised:	
Substance number: 01	45900000100-045	Replaces Version: 1 / GB	Print da	ate: 12.05.23

3.1. Waste treatment methods

Disposal recommendations for the product

Do not allow to enter drains or water courses. Dispose of waste according to applicable legislation. Dispose of as hazardous waste.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste. Completely emptied packagings can be given for recycling.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Subsidiary risk		-	-
Label			
14.4. Packing group	-	-	-
Transport category	0		
14.5. Environmental hazards		no	
	-		-

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

no

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC

VOC (EU)

%

5

Item Numbers: 24547-1009

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ade name: Marabu Aqua Pen	Vega Mash 12pcs MNA 045		
	Version: 2/GB		Date revised: 24.01.2020
ubstance number: 014590000	0100-045 Replaces Version:	1 / GB	Print date: 12.05.23
Other information			
	ntain substances of very high cond	cern (SVHC).	
5.2. Chemical safety ass			
For this preparation a ch	emical safety assessment has not	been carried out.	
ECTION 16: Other info	ormation		
Hazard statements liste	-		
H301	Toxic if swallowed.		
H302	Harmful if swallowed.		
H310	Fatal in contact with skin.		
H314 H317	Causes severe skin burns ar May cause an allergic skin re		
H318	Causes serious eye damage		
H330	Fatal if inhaled.	;_	
H373	May cause damage to organ	is through prolong	ed or repeated exposure
H400	Very toxic to aquatic life.	e un eugn preieng	
H410	Very toxic to aquatic life with	long lasting effec	ts.
CLP categories listed ir		0 0	
Acute Tox. 2	Acute toxicity, Category 2		
Acute Tox. 3	Acute toxicity, Category 3		
Acute Tox. 4	Acute toxicity, Category 4		
Aquatic Acute 1	Hazardous to the aquatic env		
Aquatic Chronic 1	Hazardous to the aquatic env		c, Category 1
Eye Dam. 1	Serious eye damage, Catego		
Skin Corr. 1C	Skin corrosion, Category 1C		
Skin Sens. 1A	Skin sensitization, Category		Coto nome O
STOT RE 2	Specific target organ toxicity	- repeated exposi	ure, Category 2
Supplemental informati		ha aafati data ahi	
	ared with the previous version of t I on our present state of knowledg		
	c product properties and shall not		
	afety Data Sheet is based on the p		
legislation.			
It provides guidance on I	ealth, safety and environmental a	spects of the proc	duct and should not be
	tee of technical performance or su		
The product should not b	e used for purposes other than the	ose shown in Sec	tion 1 without first referring
	ning written handling instructions.	the second Provide second	
	s of use of the product are outside		ntrol, the user is responsible
	irements of relevant legislation ar d in this safety data sheet does no		cor's own accossment of
	red by other health and safety leg		set's own assessment of

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MSDS for #24547 - MARB AQU				Page <u>>1 of 7</u>
Safety data sheet in accorda	nce with regula	tion (EC) No 1907/2	006	
Trade name: Marabu Aqua Pe	en Mega Mash 1	2pcs MNA 068		
		Version: 2/GB		Date revised: 24.01.2020
Substance number: 01459000	000100-068	Replaces Version:	1 / GB	Print date: 12.05.23
SECTION 1: Identifica company/undertaking 1.1. Product identifier Marabu Aqua Pen Mer 1.2. Relevant identified u Use of the substance/pr Paint Identified Uses SU21 PC9a 1.3. Details of the supplit Address/Manufacture Marabu GmbH & Co. H Asperger Strasse 4 71732 Tamm Germany Telephone no. Information provided	ga Mash 12pcs uses of the s reparation Consumer use Coatings and p ier of the saf r KG +49-7141/691-	MNA 068 Substance or mix as: Private household paints, thinners, paint rety data sheet	ture and uses	advised against
by / telephone E-mail address of person responsible for this SDS 1.4. Emergency telepho e	PRSI@marabu ne number	u.com		
(+49) (0)621-60-43333	3			
SECTION 2: Hazards	identificati	<u>on</u>		
2.1. Classification of the This product is not class		••••••	Regulation (EC)	No 1272/2008.
2.2. Label elements				
Labelling according	ı to regulatio	n (EC) No 1272/2	8008	
EUH208 Contains		of 5-chloro-2-methyl- othiazol-3-one (3:1),		
Supplemental information	ation			
Labelling according to Contains a biocidal pro 2-methyl-2H-isothiazol	oduct: reaction r	-	ethyl-2H-isothiazol	I-3-one and
2.3. Other hazards No special hazards ha	ive to be mentio	ned.		
SECTION 3: Composi	ition/inforn	nation on ingre	edients ***	
3.2. Mixtures				
Hazardous ingredient	S ***			
Ethanediol CAS No.	107-21-1			

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rade name: Marabu Aqua P	_	Version	2 / GE			Marab Date revised: 24.01.2020 Print date: 12.05.23
Substance number: 0145900	0000100-068	Replace	s versio	on: 1/GB		Fint date: 12.05.23
EINECS no. Registration no. Concentration Classification (Regula	203-473-3 01-211945681 >= ation (EC) No. 12 Acute Tox. 4 STOT RE 2	1	< H302 H373	10	%	
reaction mass of 5-ch CAS No.	loro-2-methyl-2 55965-84-9	H-isothia:	zol-3-on	e and 2-m	ethyl-2H	-isothiazol-3-one (3:1)
Concentration (Regula	>= ation (EC) No. 12 Acute Tox. 2 Aquatic Chron Aquatic Acute Skin Sens. 1A Skin Corr. 1C Acute Tox. 2 Acute Tox. 3 Eye Dam. 1	ic 1 1		0,0015	%	
ECTION 4: Eirct aid	Eye Irrit. 2 Skin Irrit. 2 Skin Sens. 1 Aquatic Acute Aquatic Chron 1 Eye Dam. 1		5 >= >= 0 M = 0 M =	0,06 < 0,6 0,06 < 0,6 0,0015 = 100 = 100 0,6 %		
ECTION 4: First aid I.1. Description of first		c				
After skin contact	alu measure	3				
After ingestion	sh the eyes thore	oughly with	n water (15 min.). Ir	n case of	irritation consult an oculist. e event of symptoms take
1.2. Most important syr Until now no symptor			both a	cute and	delaye	d
1.3. Indication of any in Hints for the physici Treat symptomaticall	nmediate me an / treatment ^y	dical att	ention	and spe	cial tre	atment needed
ECTION 5: Firefight		res				
5.1. Extinguishing med Suitable extinguishir						
Carbon dioxide, Foar	-					

Safety data sheet in accordance wit		χ	12006	Page 33
	tn regula	πιση (EC) NO 1907	2006	
Frade name: Marabu Aqua Pen Mega	a Mash 1	2pcs MNA 068		
		Version: 2/GB		Date revised: 24.01.202
Substance number: 0145900000100	-068	Replaces Version	: 1/GB	Print date: 12.05.2
In the event of fire the followir black smoke; Nitrogen oxides			monoxide (CO);	Carbon dioxide (CO2); dense
5.3. Advice for firefighters				
Other information				
Collect contaminated fire-figh	ting wate	er separately, must	not be discharge	d into the drains.
SECTION 6: Accidental re	lease	<u>measures</u>		
6.1. Personal precautions, pro		e equipment an	d emergency	r procedures
6.2. Environmental precaution	ns			
6.3. Methods and material for Clean preferably with a deter	contai		ning up	
6.4. Reference to other sectio	0			
Information regarding Safe has see Section 8. Information reg				personal protective measures,
SECTION 7: Handling and	stora	ge		
7.1. Precautions for safe hand	dling			
Advice on safe handling				
Avoid skin and eye contact. S	Smoking,	eating and drinking	shall be prohibit	ed in application area.
Advice on protection agains	-		•	
No special measures required				
		oloco / Ignition	aroup / Duct o	valesien eless
Classification of fires / temp	T2	e class / ignition	group / Dust e	
l emperature class				
Temperature class 7.2 Conditions for safe stora	ae incl	luding any inco	mnatibilities	
7.2. Conditions for safe stora Requirements for storage re	•		mpatibilities	
7.2. Conditions for safe stora Requirements for storage re Store in frostfree conditions.	•		mpatibilities	
7.2. Conditions for safe stora Requirements for storage re Store in frostfree conditions.	•		mpatibilities	
 7.2. Conditions for safe storage response of the storage response of	ooms a	nd vessels		
 7.2. Conditions for safe storage responsibility. 7.3. Specific end use(s) Paint 8. Exposure conditions 	ooms a	nd vessels		
 7.2. Conditions for safe storage response of the storage response of the storage response of the store in frostfree conditions. 7.3. Specific end use(s) Paint SECTION 8: Exposure conditions 	ooms a	nd vessels		
 7.2. Conditions for safe storage restrictions. 7.3. Specific end use(s) Paint SECTION 8: Exposure conditions. 8.1. Control parameters Exposure limit values Ethanediol 	ooms a	nd vessels		
 7.2. Conditions for safe storage restrictions. 7.3. Specific end use(s) Paint SECTION 8: Exposure conditions. 8.1. Control parameters Exposure limit values Ethanediol List 	ooms an ntrols/	nd vessels		
 7.2. Conditions for safe storage restrictions. 7.3. Specific end use(s) Paint SECTION 8: Exposure control parameters Exposure limit values Ethanediol List Type 	ooms an ntrols/ EH40 WEL	nd vessels		
 7.2. Conditions for safe storage restrictions. 7.3. Specific end use(s) Paint SECTION 8: Exposure consecutions. 8.1. Control parameters Exposure limit values Ethanediol List Type Value 	EH40 WEL 10	nd vessels personal prot		
 7.2. Conditions for safe storage restrictions. 7.3. Specific end use(s) Paint SECTION 8: Exposure control parameters 8.1. Control parameters Exposure limit values Ethanediol List Type Value Skin resorption / sensibilisation 	EH40 WEL 10	nd vessels personal prot		
 7.2. Conditions for safe storage restrictions. 7.3. Specific end use(s) Paint SECTION 8: Exposure control parameters 8.1. Control parameters Exposure limit values Ethanediol List Type Value Skin resorption / sensibilisation 	EH40 WEL 10 Dn: Sk: 20	nd vessels personal prot		
 7.2. Conditions for safe storage restores in frostfree conditions. 7.3. Specific end use(s) Paint SECTION 8: Exposure consistent of the second state of the sec	EH40 WEL 10 Dn: Sk: 20 EU	nd vessels personal prot mg/m ³	<u>ection</u>	2222(1/)
 7.2. Conditions for safe storage restore in frostfree conditions. 7.3. Specific end use(s) Paint SECTION 8: Exposure consistent of the second state of the second state	EH40 WEL 10 on: Sk: 20 EU 52	nd vessels personal prot mg/m ³ 011 mg/m ³	tection 20	ppm(V)
 7.2. Conditions for safe storage restore in frostfree conditions. 7.3. Specific end use(s) Paint SECTION 8: Exposure constraint SECTION 8: Exposure constraint 8.1. Control parameters Exposure limit values Ethanediol List Type Value Skin resorption / sensibilisation Ethanediol List Value Short term exposure limit 	EH40 WEL 10 on: Sk: 20 EU 52 104	nd vessels personal prof mg/m ³ 011 mg/m ³ mg/m ³	20 40	ppm(V) ppm(V)
 7.2. Conditions for safe storage restore in frostfree conditions. 7.3. Specific end use(s) Paint SECTION 8: Exposure content of the second state of the second	EH40 WEL 10 on: Sk: 20 EU 52 104	nd vessels personal prot mg/m ³ 011 mg/m ³	20 40	
 7.2. Conditions for safe storage restore in frostfree conditions. 7.3. Specific end use(s) Paint SECTION 8: Exposure constraint SECTION 8: Exposure constraint 8.1. Control parameters Exposure limit values Ethanediol List Type Value Skin resorption / sensibilisation Ethanediol List Value Short term exposure limit 	EH40 WEL 10 on: Sk: 20 EU 52 104	md vessels personal prot mg/m ³ 011 mg/m ³ Remarks: 2000/3	20 40	

Sarety data sheet in accordance .	with regulation (EC) No 1907/2006	
rade name: Marabu Aqua Pen Me	ega Mash 12pcs MNA 068	
	Version: 2/GB	Date revised: 24.01.2020
Substance number: 01459000001	00-068 Replaces Version: 1 / GB	Print date: 12.05.23
Туре	WEL	
Value Status: 2011	10 mg/m³	
Other information		
There are not known any fu	•	
Derived No/Minimal Effec	t Levels (DNEL/DMEL)	
Ethanediol		
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure Mode of action	inhalative	
Concentration	Local effects 35	mg/m³
Concentration	35	mg/ms
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	<i>"</i>
Concentration	106	mg/kg
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	7	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	53	mg/kg
Predicted No Effect Conc	entration (PNEC)	
Ethanediol		
Type of value	PNEC	
Туре	Freshwater	
Concentration	10	mg/l
Type of value	PNEC	
Туре	Saltwater	
Concentration	1	mg/l
Type of value	PNEC	
Туре	Water (intermittent release)	
Concentration	10	mg/l
Type of value	PNEC	
Туре	Sewage treatment plant (STP)	
Concentration	199,5	mg/l
Type of value	PNEC	
Туре	Freshwater sediment	
Concentration	37	mg/kg

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ade name: Marabu Aqua Pen	Mega Mash 12	pcs MNA 06	68		
		Version: 2	/ GB		Date revised: 24.01.2020
ubstance number: 014590000	0100-068	Replaces V	ersion:	1 / GB	Print date: 12.05.23
Type of value	PNEC				
Туре	-	e sediment			
Concentration		3,7			mg/kg
Type of value	PNEC				
Type Concentration	Soil	1,53			mg/kg
.2. Exposure controls					
Exposure controls					
Provide adequate ventil	ation.				
Respiratory protection					
Not necessary.					
Hand protection					
individual or combination For prolonged or repeate Material thickness Breakthrough time The breakthrough time r The instructions and infor replacement must be fol Gloves should be replace Always ensure that glov The performance or effer maintenance.	aterial or combin of chemicals. ed handling nitri > 0, < 30 nust be greater ormation provide lowed. ed regularly and es are free from ctiveness of the o to protect the e	nation of ma le rubber glu 5 mr 5 mr construction than the en- bed by the glo d if there is a defects and a glove may exposed are	aterials oves with n d use the ove mar any sigr d that th be redu	th textile und me of the pro- nufacturer on n of damage ey are stored iced by phys e skin, they s	oduct. use, storage, maintenance and to the glove material.
.1. Information on basic				-	
Physical state	liquid				
Colour	coloure				
Odour	odourl	ess			
Melting point					
Remarks	not de	termined			
Freezing point					
Remarks		termined			
Boiling point or initial k		-	g range		
Value	appr.	100 1.013	hBa		°C
Pressure			hPa		
Source	l iterat	ure value			
Source Flammability	Literat	ure value			

Trade name: Marabu Aqua Pen Meg	a Mash			Marabu
		Version: 2/GB	1.00	Date revised: 24.01.2020
Substance number: 0145900000100	-068	Replaces Version: 1	/ GB	Print date: 12.05.23
Upper and lower explosive	limits			
Lower explosion limit	app	r. 3,2	%(V)	
Upper explosion limit	app		%(V)	
Source	Liter	rature value		
Flash point				
Remarks	Not	applicable		
Ignition temperature				
Value	app		°C	
Source	Liter	rature value		
Viscosity				
Remarks		datarminad		
Remarks	not	determined		
Vapour pressure				
Value Temperature	app	r. 23 20 ℃	hPa	
Method	Valı	ue taken from the literatu	ire	
Density and/or relative den				
Remarks	-	determined		
	not	determined		
Relative vapour density		determente e d		
Remarks	not	determined		
9.2. Other information				
Odour threshold				
Remarks	No	data available		
Evaporation rate (ether = 1)	:			
Remarks		determined		
Solubility in water				
Remarks	miso	cible		
Other information				
None known				
SECTION 10: Stability and	l reac	tivity		
10.1. Reactivity				
None				
10.2. Chemical stability				
No hazardous reactions know	vn.			
10.3. Possibility of hazardous No hazardous reactions know		ions		
10.4. Conditions to avoid No hazardous reactions know	vn.			
10.5. Incompatible materials None				
10.6. Hazardous decompositi No hazardous decomposition	on pro	oducts ts known.		

Substance num I1.1 Informa Acute ora Remark		00-068	Version: 2	/ GB	Marab Date revised: 24.01.2020
1.1 Informa Acute ora Remark Acute ora Ethanedi Species	tion on hazard			-	Date revised: 24.01.2020
1.1 Informa Acute ora Remark Acute ora Ethanedi Species	tion on hazard		Replaces Ve		
Acute ora Remark Acute ora Ethanedi Species				ersion: 1/GB	Print date: 12.05.2
Remark Acute ora Ethanedi Species	al toxicity	classes	s as defined i	in Regulation (EC) No 1272/2008
Acute ora Ethanedi Species		_			
Ethanedi Species				ta, the classification	n criteria are not met.
Species	al toxicity (Comp	onents)			
11250	i	rat	7712	m	g/kg
	mal toxicity		7712		9/109
Remark	-	Based	on available da	ta the classification	n criteria are not met.
	mal toxicity (Co				in chiena are not met.
		nponei	113)		
Ethanedi Species		rabbit			
LD50		>	9530	m	g/kg
Acute inh	alational toxicity	,			
Remark	-		l on available da	ta, the classificatio	n criteria are not met.
Skin corr	osion/irritation			,	
Remark		Based	l on available da	ta. the classificatio	n criteria are not met.
	ye damage/irrita			,	
Remark			on available da	ta, the classificatio	n criteria are not met.
Sensitiza		Daood			
Remark		Based	l on available da	ta the classification	n criteria are not met.
Mutageni		Duood			
Remark	-	Based	l on available da	ta the classificatio	n criteria are not met.
	tive toxicity	Daood			
Remark	-	Based	l on available da	ta the classificatio	n criteria are not met.
Carcinog		Dubbu			noncena are not met.
Remark	-	Based	l on available da	ta the classification	n criteria are not met.
	ି Farget Organ To>				noncena are not met.
-			101)		
Single Remark	exposure	Deced	l an available de	to the close firstic	n aritaria ara nat mat
_	-	Based	i on available da	ta, the classificatio	n criteria are not met.
Repeat Remark	ed exposure	Bacad	on available da	ta the classification	n criteria are not met.
		Daseu	i on avaliable ua		n chiena are not met.
Aspiratio	n nazaro on available data, th	a alaaaifi	antion aritoria ar	a not mot	
	,	e classifi	cation criteria ar	e not met.	
•	ce in practice				
limit ma and adv dizzines Solvent contact dermati reversit known,	y result in adverse l rerse effects on kidr s, fatigue, muscula s may cause some with the mixture ma tis and absorption the damage. Ingestic	nealth eff ney, liver r weakne of the ab ay cause nrough th on may ca liate effect	ects such as mu and central nerv ss, drowsiness a ove effects by al removal of natur e skin. The liqui ause nausea, dia cts and also chro	icous membrane a rous system. Symp and in extreme cas osorption through the ral fat from the skin d splashed in the e arrhoea and vomitionic effects of comp	e stated occupational exposure nd respiratory system irritation toms and signs include headache, es, loss of consciousness. he skin. Repeated or prolonged resulting in non-allergic contact eyes may cause irritation and ng. This takes into account, where ponents from short-term and and eye contact.

The mixture has been assessed following the additivity method of the CLP Regulation (EC) No

/ISDS for #24547 - MARB AQUA Safety data sheet in accordance	PEN GRAPIX	(EC) No 1907/	2006	Page ** ~
rade name: Marabu Aqua Pen N	•			Marab
	Ve	rsion: 2/GB		Date revised: 24.01.2020
Substance number: 0145900000	100-068 Re	places Version:	1 / GB	Print date: 12.05.23
1272/2008 and classified	for toxicological h	nazards accordir	ngly.	
SECTION 12: Ecologica	Linformatio	n		
12.1. Toxicity	<u>i iniorniatio</u>	<u>// 1</u>		
General information				
There are no data availab	ed following the s	ummation methe		ins or water courses.The Regulation (EC) No 1272/2008
Fish toxicity (Componer	-			
Ethanediol	-			
Species		now (Pimephale	s promelas)	
LC50	8050		mg/l	
Duration of exposure	96 2 mothyl 2H igg	h hiazal 2 ana 4	and 2 method	24 isothiszol 2 czs (2:1)
reaction mass of 5-chloro Species		t (Oncorhynchus		2n-isotniazoi-3-one (3:1)
LC50	0,18		mg/l	
Duration of exposure	96	h	3	
Daphnia toxicity (Compo	onents)			
Ethanediol				
Species	Daphnia mag			
Duration of exposure	> 1000 24	h h	mg/l	
Duration of exposure reaction mass of 5-chloro			and 2-mothyl-	24-is othiszol-2-ono (2.1)
Species	Daphnia mag			211-130(11a201-3-011e (3.1)
EC50	. 0,12		mg/l	
Duration of exposure	48	h		
Algae toxicity (Compone	ents)			
reaction mass of 5-chloro			and 2-methyl-2	2H-isothiazol-3-one (3:1)
Species		capricornutum	/	
EC50 Duration of exposure	0,02 ⁻ 72	/ h	mg/l	
12.2. Persistence and degi	adability			
General information				
There are no data availab	le on the mixture	itself.		
12.3. Bioaccumulative pote	ential			
General information				
There are no data availab	le on the mixture	itself.		
12.4. Mobility in soil				
General information				
There are no data availab	le on the mixture	itself.		
12.5. Results of PBT and v	PvB assessm	ent		
General information				
There are no data availab	le on the mixture	itsolf		
12.7. Other adverse effects	5			
General information				
There are no data availab				

_	MSDS for #24547 - MARB AQUA PEN GRAPIX Safety data sheet in accordance with regulation (EC) No 1907/2006	Page
	Trade name: Marabu Aqua Pen Mega Mash 12pcs MNA 068	Marabu
	Version: 2 / GB	Date revised: 24.01.2020
	Substance number: 0145900000100-068 Replaces Version: 1 / GB	Print date: 12.05.23

Substance number: 0145900000100-068

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Do not allow to enter drains or water courses. Dispose of waste according to applicable legislation. Dispose of as hazardous waste.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste. Completely emptied packagings can be given for recycling.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Subsidiary risk		-	-
Label			
14.4. Packing group	-	-	-
Transport category	0		
14.5. Environmental hazards		no	
	-		-

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

no

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC

VOC (EU)

%

5

rade name: Marabu Aqua Pen N	/lega Mash ⁻	12pcs MNA 068		
		Version: 2/GB		Date revised: 24.01.2020
Substance number: 0145900000	100-068	Replaces Version	: 1/GB	Print date: 12.05.23
Other information				
The product does not con	itain substar	ices of very high cor	ncern (SVHC).	
5.2. Chemical safety asse				
For this preparation a che	emical safety	assessment has no	t been carried o	ut.
ECTION 16: Other info	ormation			
Hazard statements listed	-			
H301		swallowed.		
H302		l if swallowed.		
H310		contact with skin.		
H314		severe skin burns a		
H317		use an allergic skin ı serious eye damaqı		
H318 H330		inhaled.	e.	
H373			ns through prolo	nged or repeated exposure.
H400		kic to aquatic life.	no unough proio	liged of repeated expediate.
H410		kic to aquatic life with	n long lasting eff	ects.
CLP categories listed in	-	•	0 0	
Acute Tox. 2	-	oxicity, Category 2		
Acute Tox. 3		oxicity, Category 3		
Acute Tox. 4		oxicity, Category 4		
Aquatic Acute 1	Hazard	ous to the aquatic er	nvironment, acut	e, Category 1
Aquatic Chronic 1		ous to the aquatic er		nic, Category 1
Eye Dam. 1		eye damage, Categ		
Skin Corr. 1C		rrosion, Category 10		
Skin Sens. 1A		nsitization, Category		Catanan O
STOT RE 2		target organ toxicity	/ - repeated expe	osure, Category 2
Supplemental information Relevant changes compa		provinue version of	the estate data a	beet are marked with ***
This information is based				
guarantee for any specific				
The information in this Sa				
legislation.	,			5
It provides guidance on h	ealth, safety	and environmental	aspects of the pr	roduct and should not be
construed as any guarant				
The product should not be	e used for pu	urposes other than th	nose shown in S	ection 1 without first referring
to the supplier and obtain				
				control, the user is responsible
for ensuring that the requi				user's own assessment of
workplace risks, as requir				e user s own assessment of
			giolationi	

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ouncity	for #24547 - MARB AQI data sheet in accorda			006	Page ** ·
		-	、 ,		
rade na	ame: Marabu Aqua Pe	en Mega Mash			Marab
			Version: 1/GB	1.00	Date revised: 22.11.2019
Substar	nce number: 0145900	000100-073	Replaces Version:	- / GB	Print date: 12.05.23
omp	ION 1: Identifica any/undertaking roduct identifier		e substance/mi	xture and of t	the_
	Marabu Aqua Pen Me			_	
1.2. R	elevant identified	uses of the s	substance or mix	ture and uses a	idvised against
Use o	of the substance/pr Paint	reparation			
ld	lentified Uses	_			
	SU21 PC9a		es: Private households paints, thinners, paint		consumers)
1.3. D	etails of the suppl	ier of the sa	fety data sheet		
	Marabu GmbH & Co. I Asperger Strasse 4 71732 Tamm Germany Telephone no. Information provided by / telephone E-mail address of person responsible for this SDS	+49-7141/691	roduct safety		
	mergency telepho (+49) (0)621-60-43333	3			
	ION 2: Hazards				
21 C	lassification of the This product is not cla			Regulation (EC) No	1272/2008
2.1.0	•				1212/2000.
_	abel elements				1212/2000.
2.2. La		to regulatio	on (EC) No 1272/2	008	
2.2. La	abel elements abelling according EUH208 Contains	reaction mass	on (EC) No 1272/2 of 5-chloro-2-methyl- sothiazol-3-one (3:1), l	2H-isothiazol-3-one	and
2.2. La La	abelling according	reaction mass 2-methyl-2H-is	of 5-chloro-2-methyl-2	2H-isothiazol-3-one	and
2.2. La La Si	abelling according EUH208 Contains	reaction mass 2-methyl-2H-is ation o regulation (oduct: reaction	of 5-chloro-2-methyl- sothiazol-3-one (3:1), I EU) No 528/2012	2H-isothiazol-3-one May produce an alle	and ergic reaction.
2.2. La La Si La	abelling according EUH208 Contains upplemental informa abelling according to Contains a biocidal pro	reaction mass 2-methyl-2H-is ation o regulation (oduct: reaction I-3-one (3:1)	of 5-chloro-2-methyl- sothiazol-3-one (3:1), I EU) No 528/2012 mass of 5-chloro-2-me	2H-isothiazol-3-one May produce an alle	and ergic reaction.
2.2. La La La 2.3. O	abelling according EUH208 Contains upplemental informa abelling according to Contains a biocidal pro 2-methyl-2H-isothiazo	reaction mass 2-methyl-2H-is ation o regulation (oduct: reaction I-3-one (3:1) ave to be mentic	of 5-chloro-2-methyl- sothiazol-3-one (3:1), I EU) No 528/2012 mass of 5-chloro-2-me oned.	2H-isothiazol-3-one May produce an alle ethyl-2H-isothiazol-3	and ergic reaction.
2.2. La La SI La 2.3. O <u>SECT</u>	abelling according EUH208 Contains upplemental informa abelling according to Contains a biocidal pro 2-methyl-2H-isothiazo bther hazards No special hazards ha	reaction mass 2-methyl-2H-is ation o regulation (oduct: reaction I-3-one (3:1) ave to be mentic	of 5-chloro-2-methyl- sothiazol-3-one (3:1), I EU) No 528/2012 mass of 5-chloro-2-me oned.	2H-isothiazol-3-one May produce an alle ethyl-2H-isothiazol-3	and ergic reaction.
2.2. La La 2.3. O <u>SECT</u> 3.2. M	abelling according EUH208 Contains upplemental informa abelling according to Contains a biocidal pro 2-methyl-2H-isothiazo other hazards No special hazards ha	reaction mass 2-methyl-2H-is ation o regulation (oduct: reaction I-3-one (3:1) ave to be mention ition/inform	of 5-chloro-2-methyl- sothiazol-3-one (3:1), I EU) No 528/2012 mass of 5-chloro-2-me oned.	2H-isothiazol-3-one May produce an alle ethyl-2H-isothiazol-3	and ergic reaction.

rade name: Marabu Aqua F	en Mega Mash 1	2pcs MNA	073			N
		Version:	1 / GE	3		Date revised: 22.11.2019
Substance number: 014590	0000100-073	Replace	s Versio	n: -/GB		Print date: 12.05.23
EINECS no.	203-473-3					
Registration no.	01-211945681					
Concentration	>=	1	<	10	%	
Classification (Regula	Acute Tox. 4	272/2008)	H302			
	STOT RE 2		H373			
reaction mass of 5-ch CAS No.	1loro-2-methyl-2 55965-84-9	H-isothiaz	ol-3-on	e and 2-m	ethyl-2H	-isothiazol-3-one (3:1)
Concentration	>=	0,001	<	0,0015	%	
Classification (Regula	Acute Tox. 2	272/2008)	H330			
	Aquatic Chron	ic 1	H410			
	Aquatic Acute		H400			
	Skin Sens. 1A		H317			
	Skin Corr. 1C		H314			
	Acute Tox. 2 Acute Tox. 3		H310 H301			
	Eye Dam. 1		H318			
Concentration limits		No. 1272/2	2008)			
	Skin Corr. 1C	H314				
	Eye Irrit. 2 Skin Irrit. 2	H319 H315		0,06 < 0,6 0,06 < 0,6		
	Skin Sens. 1	H315		0,00 < 0,0		
	Aquatic Acute			: 100		
	Aquatic Chron	ic H410	M =	: 100		
	1 Eye Dam. 1	H318	>=	0,6 %		
ECTION 4. First sid						
ECTION 4: First aid		c				
After skin contact		5				
Wash with plenty of v	water and soan		o solvor	ate or thinn	ore	
	water and soap. I	50 1101 03	e 301vei		ci3.	
After eye contact	ch the ever there	wahly with	wator (15 min) In	case of	irritation consult an oculist.
	ish the eyes thore	buginy with	water (15 1111.). 1	i case oi	initiation consult an oculist.
After ingestion					-l	
medical treatment.	inly with water. If	larger amo	ounts are	e swallowe	a or in the	e event of symptoms take
I.2. Most important syn Until now no symptor		effects, k	ooth a	cute and	delaye	d
1.3. Indication of any ir	nmediate me	dical atte	ention	and spe	cial tre	atment needed
Hints for the physical Treat symptomatical						
	-					
ECTION 5: Firefight	ting measu	res				
5.1. Extinguishing med Suitable extinguishin Carbon dioxide, Foar	ng media					

ISDS for #24547 - MARB AQUA PEN GRAP	/X	2006	Page
Safety data sheet in accordance with regu	141011 (EG) NO 1907/2		
rade name: Marabu Aqua Pen Mega Mash	12pcs MNA 073		ΔX
	Version: 1/GB		Date revised: 22.11.2019
Substance number: 0145900000100-073	Replaces Version:	- / GB	Print date: 12.05.23
In the event of fire the following can b black smoke	be released: Carbon m	nonoxide (CO);	Carbon dioxide (CO2); dense
5.3. Advice for firefighters			
Other information			
Collect contaminated fire-fighting wat	ter separately, must no	ot be discharge	d into the drains.
		-	
ECTION 6: Accidental release			_
6.1. Personal precautions, protectiv No particular measures required.	ve equipment and	lemergency	v procedures
6.2. Environmental precautions No particular measures required.			
6.3. Methods and material for conta Clean preferably with a detergent - a		ning up	
6.4. Reference to other sections Information regarding Safe handling, see Section 8. Information regarding	see Section 7. Inform waste disposal, see S	ation regarding Section 13.	personal protective measures,
SECTION 7: Handling and stora	age		
7.1. Precautions for safe handling			
Advice on safe handling			
Avoid skin and eye contact. Smoking	g, eating and drinking s	shall be prohibit	ed in application area.
Advice on protection against fire a	and explosion		
No special measures required.			
Classification of fires / temperatur	re class / Ignition g	roup / Dust e	explosion class
Temperature class T2			
7.2. Conditions for safe storage, inc	cluding any incon	npatibilities	
Requirements for storage rooms a Store in frostfree conditions.	and vessels		
7.3. Specific end use(s)			
Paint			
SECTION 8: Exposure controls	/personal prote	ection	
8.1. Control parameters			
Exposure limit values			
Ethanediol			
	-		
List EH4			
Type WE	ma/m³		
	mg/m³ 2011		
Type WE Value 10			
Type WE Value 10 Skin resorption / sensibilisation: Sk: 2 Ethanediol List EU	2011		
Type WE Value 10 Skin resorption / sensibilisation: Sk: 2 Ethanediol List EU Value 52	2011 mg/m³	20	ppm(V)
TypeWEValue10Skin resorption / sensibilisation: Sk: 2EthanediolListEUValue52Short term exposure limit104	2011 mg/m³ I mg/m³	40	ppm(V) ppm(V)
TypeWEValue10Skin resorption / sensibilisation: Sk: 2EthanediolListEUValue52Short term exposure limit104Skin resorption / sensibilisation: Skin	2011 mg/m³ I mg/m³	40	
TypeWEValue10Skin resorption / sensibilisation: Sk: 2EthanediolListEUValue52Short term exposure limit104	2011 mg/m ³ I mg/m ³ I; Remarks: 2000/39	40	

Sarety data sheet in accordance	with regulation (EC) No 1907/2006	
rade name: Marabu Aqua Pen Me		
	Version: 1/GB	Date revised: 22.11.2019
Substance number: 01459000001		Print date: 12.05.2
Туре	WEL	
Value	10 mg/m ³	
Status: 2011	10 mg/m	
Other information		
There are not known any fu	urther control parameters	
Derived No/Minimal Effect	•	
Ethanediol Type of value	Derived No Effect Level (DNEL)	
Reference group	Derived No Effect Level (DNEL) Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	35	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group Duration of exposure	Worker	
Route of exposure	Long term dermal	
Mode of action	Systemic effects	
Concentration	106	mg/kg
		3. 3
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action Concentration	Local effects 7	mg/m³
Concontration	·	
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action Concentration	Systemic effects 53	mg/kg
Concentration		ing/kg
Predicted No Effect Conc	entration (PNEC)	
Ethanediol		
Type of value	PNEC	
Туре	Freshwater	<i>"</i>
Concentration	10	mg/l
Type of value	PNEC	
Туре	Saltwater	
Concentration	1	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	10	mg/l
	PNEC	
Type of value Type	Sewage treatment plant (STP)	
Concentration	199,5	mg/l
	PNEC	
Type of value Type	PNEC Freshwater sediment	
Concentration	37	mg/kg

Page 34 of 71

		-	on (EC) N			
Trade name: Marabu Aqua Pen Mega Mash 12pcs MNA 073						Marab
			Version:	1 / GB		Date revised: 22.11.2019
Substance number:	0145900000100-0	73	Replaces '	Version:	- / GB	Print date: 12.05.23
Type of valu		PNEC				
Type of valu	e		sediment			
Concentratio	วท		3,7			mg/kg
Type of valu	e	PNEC				
Type Concentratio	วท	Soil	1,53			mg/kg
8.2. Exposure co	ontrols					
Exposure co	ntrols					
	quate ventilation.					
Respiratory p Not necessa						
Hand protect	ion					
Not necessa						
There is no of individual or For prolonge Material thic Breakthroug The breakth The instruction Gloves shou Always ensu The perform maintenance Barrier crear once exposu Eye protection Not necessa Body protect Not applicab	combination of che ed or repeated hand kness > h time < rough time must be ions and information t must be followed. Id be replaced regu- ure that gloves are f ance or effectivene e. ms may help to protoure has occurred. on ary. ion ble.	br combi micals. Iling nitri 0, 30 greater n provide ularly and ree from ss of the tect the e	nation of n le rubber g 5 m than the en ed by the g d if there is defects an glove may exposed ar	naterials loves with min nd use til love mar any sigr nd that th y be redu reas of th	th textile up me of the p nufacturer of damag ley are sto liced by ph le skin, the	ve unlimited resistance to any ndergloves are required. product. on use, storage, maintenance and ge to the glove material. red and used correctly. ysical/ chemical damage and poor sy should however not be applied
			d chemic	cal pro	perties	
	e	liquid coloure	he			
Physical state		COLOUIE				
Physical state Colour		odourle	ess			
Physical stat Colour Odour		odourle	ess			
Physical stat Colour Odour Melting point	:					
Physical state Colour Odour Melting point Remarks			ermined			
Physical state Colour Odour Melting point Remarks Freezing poir		not det	ermined			
Physical state Colour Odour Melting point Remarks Freezing poir Remarks	nt	not det not det	ermined	id range	A	
Physical state Colour Odour Melting point Remarks Freezing poir Remarks Boiling point		not det not det point a	ermined ermined and boilin	ig range	•	°C
Colour Odour Melting point Remarks Freezing poir Remarks	nt	not det not det	ermined	n g range hPa	•	°C
Physical state Colour Odour Melting point Remarks Freezing poir Remarks Boiling point Value	nt	not det not det point a appr.	ermined ermined i nd boilin 100		9	°C

rade name: Marabu Aqua Pen Mega N Substance number: 0145900000100-0		2pcs MNA 073 Version: 1 / GB Replaces Version: - / 0	GB	Marabu Date revised: 22.11.2019 Print date: 12.05.23			
Upper and lower explosive lin	nits						
Lower explosion limit Upper explosion limit Source	appr. appr.	3,2 53 ture value	%(V) %(V)				
Flash point							
Remarks	Not ap	pplicable					
Ignition temperature							
Value Source	appr. Literat	410 ture value	°C				
Viscosity							
Remarks Remarks	not de	etermined					
Vapour pressure							
Value Temperature Method	appr. Value	23 20 °C taken from the literature	hPa				
Density and/or relative densit							
Remarks	-	etermined					
Relative vapour density Remarks		etermined					
9.2. Other information							
Odour threshold							
Remarks	No da	ita available					
Evaporation rate (ether = 1) :							
Remarks	not de	etermined					
Solubility in water							
Remarks	miscib	ble					
Other information None known							
ECTION 10: Stability and r	eacti	<u>vity</u>					
10.1. Reactivity None							
10.2. Chemical stability No hazardous reactions known.							
10.3. Possibility of hazardous r No hazardous reactions known.	eactio	ons					
10.4. Conditions to avoid No hazardous reactions known.							
10.5. Incompatible materials							
10.6. Hazardous decomposition No hazardous decomposition pr							

Acute oral toxicity (Component of the species of LD50 Acute dermal toxicity Remarks Acute dermal toxicity (Component of the species of LD50 Acute dermal toxicity (Component of the species of LD50 Ethanediol Species of LD50 Acute inhalational toxicity Remarks Skin corrosion/irritation Remarks Serious eye damage/irritation Remarks Sensitization Remarks Remarks Sensitization Remarks Remarks Sensitization Remarks Remarks Acutagenicity Remarks Carcinogenicity	073 ASSES Based ents) rat Based oonen rabbit > Based Based	Version: 1 Replaces V as defined on available da 7712 on available da ts) 9530 on available da	/ GB ersion: - / GB in Regulation (ata, the classification m ata, the classification	Date revised: 22.11.20 Print date: 12.05. (EC) No 1272/2008 on criteria are not met.
.1 Information on hazard class Acute oral toxicity Remarks Acute oral toxicity (Component of the component of t	asses Based ents) rat Based ponent rabbit > Based Based	Replaces V as defined on available da 7712 on available da ts) 9530 on available da	ersion: -/GB in Regulation (ata, the classificatio m ata, the classificatio m	Print date: 12.05. (EC) No 1272/2008 on criteria are not met.
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RemarksESensitizationRemarksRemarksEMutagenicityRemarksRemarksEReproductive toxicityRemarksRemarksECarcinogenicityRemarksRemarksE	n	Un avaliable ua	ala, me classificatio	on chiena are not met.
Sensitization RemarksEMutagenicity RemarksEMutagenicity RemarksECarcinogenicity RemarksECarcinogenicity RemarksE				
RemarksEMutagenicity RemarksEReproductive toxicity RemarksECarcinogenicity RemarksE	Based	on available da	ata, the classificatio	on criteria are not met.
Mutagenicity RemarksEReproductive toxicity RemarksECarcinogenicity RemarksE				
RemarksEReproductive toxicityRemarksECarcinogenicityRemarksE	Based	on available da	ata, the classificatio	on criteria are not met.
Reproductive toxicityRemarksCarcinogenicityRemarks			- (- , () - , () - , ('() - (')	
Remarks E Carcinogenicity Remarks E	Based	on available da	ata, the classificatio	on criteria are not met.
Carcinogenicity Remarks			- (- , () - , () - , ('() - (')	
Remarks	Based	on available da	ata, the classificatio	on criteria are not met.
Specific Target Organ Toxici			ata, the classificatio	on criteria are not met.
	ity (S	101)		
Single exposure	_			
Remarks	Based	on available da	ata, the classification	on criteria are not met.
Repeated exposure	. .			
	Based	on available da	ata, the classificatio	on criteria are not met.
Aspiration hazard				
Based on available data, the c	lassific	cation criteria a	re not met.	
Experience in practice				
limit may result in adverse hea and adverse effects on kidney, dizziness, fatigue, muscular we Solvents may cause some of the contact with the mixture may c dermatitis and absorption throu	alth effe , liver a eaknes he abc ause r ugh the may ca e effec	ects such as main and central nerross, drowsiness ove effects by a removal of nature skin. The lique suse nausea, di ts and also chr	ucous membrane a vous system. Symp and in extreme cas bsorption through iral fat from the skin id splashed in the iarrhoea and vomit ronic effects of com	the skin. Repeated or prolonged n resulting in non-allergic contact eyes may cause irritation and ting. This takes into account, where ponents from short-term and
long-term exposure by oral, inf Other information	nalatio	n and dermal r	outes of exposure a	and eye contact.
There are no data available on	the m	ixture itself		

The mixture has been assessed following the additivity method of the CLP Regulation (EC) No

ISDS for #24547 - MARB AQUA I Safety data sheet in accordance	PEN GRAPIX	n (EC) No 1907	2006	Page ** ~
Juicty data sheet in decoradified				
rade name: Marabu Aqua Pen M	lega Mash 12pc	s MNA 073		Marshi
	V	ersion: 1/GB		Date revised: 22.11.2019
Substance number: 0145900000	100-073 R	eplaces Version	- / GB	Print date: 12.05.23
1272/2008 and classified	for toxicological	hazards accordi	ngly.	
ECTION 12: Ecologica	Linformati	on		
12.1. Toxicity	morman	<u>011</u>		
General information				
There are no data availab	d following the	summation meth		ains or water courses.The Regulation (EC) No 1272/2008
Fish toxicity (Componen				
Ethanediol				
Species		nnow (Pimephal	• • •	
LC50 Duration of exposure	805 96	60 h	mg/	I
reaction mass of 5-chloro			and 2-methyl-	2H-isothiazol-3-one (3.1)
Species		ut (Oncorhynchu		
LC50	0,18		mg/	I
Duration of exposure	96	h		
Daphnia toxicity (Compo	nents)			
Ethanediol Species	Daphnia ma	ana		
opeoleo	> 100	0	mg/	I
Duration of exposure	24	h		
reaction mass of 5-chloro			and 2-methyl-	2H-isothiazol-3-one (3:1)
Species EC50	Daphnia ma 0,12	0	mg/	I
Duration of exposure	48	h	3	
Algae toxicity (Compone	nts)			
reaction mass of 5-chloro	-2-methyl-2H-is	othiazol-3-one	and 2-methyl-	2H-isothiazol-3-one (3:1)
Species EC50	Selenastrur 0,02	n capricornutum		l
Duration of exposure	72	ے، h	mg/	
12.2. Persistence and degr	adability			
General information	adabinty			
There are no data availab	le on the mixtur	e itself		
12.3. Bioaccumulative pote General information	muai			
There are no data availab	le on the mixtur	o iteolf		
		e itself.		
12.4. Mobility in soil				
General information		a ita alƙ		
There are no data availab				
12.5. Results of PBT and v	PvB assessr	nent		
General information There are no data availab	le on the mixtur	e itself.		
12.7. Other adverse effects				
General information				

	MSDS for #24547 - MARB AQUA PEN GRAPIX
_	Safety data sheet in accordance with regulation (EC) No 1907/2006

Trade name: Marabu Aqua Pen Mega Mash 12pcs MNA 073

Version: 1/GB

Replaces Version: - / GB

Substance number: 0145900000100-073

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Do not allow to enter drains or water courses. Dispose of waste according to applicable legislation. Dispose of as hazardous waste.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste. Completely emptied packagings can be given for recycling.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Subsidiary risk		-	_
Label			
14.4. Packing group	-	-	-
Transport category	0		
14.5. Environmental hazards		no	
	-		-

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

no

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC

VOC (EU)

%

5

Item Numbers: 24547-1009

Date revised: 22.11.2019 Print date: 12.05.23

Page

<text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text>	
Version: 1/GB Date revised: 22.11,2 Substance number: 014590000100-073 Replaces Version: -/GB Print date: 12.05 Other information The product does not contain substances of very high concern (SVHC). 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 <t< th=""><th>\mathbb{N}</th></t<>	\mathbb{N}
Studestance number: 014590000100-073 Replaces Version: - / GB Print date: 12.05 Other information The product does not contain substances of very high concern (SVHC). 5.1 Chemical safety assessment For this preparation a chemical safety assessment has not been carried out. 5.1 Chemical safety assessment For this preparation a chemical safety assessment has not been carried out. 5.1 Chemical safety assessment For this preparation a chemical safety assessment has not been carried out. Hard Chemical safety assessment has not been carried out. 5.1 Chemical safety assessment has not been carried out. Hard Chemical safety assessment has not been carried out. 5.1 Chemical safety assessment has not been carried out. Hard Chauses severe skin burns and eye damage. 5.1 5.1 5.1 H310 Toxic if swallowed. 6.1 6.1 5.1 5.1 H314 Causes serious eye damage. 6.1 6.1 6.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 <t< th=""><th>Marabu</th></t<>	Marabu
Other information The product does not contain substances of very high concern (SVHC). 15.2. Chemical safety assessment For this preparation a chemical safety assessment has not been carried out. ECTION 16: Other information Hazard statements listed in Chapter 3 H301 Toxic if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes severe skin burns and eye damage. H330 Fatal if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. CLP categories listed in Chapter 3 Acute Tox. 3 Acute toxicity, Category 2 Acute Tox. 4 Acute toxicity, Category 1 Aquatic Acute1 Hazardous to the aquatic environment, acute, Category 1 Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 1 Skin Corr. 1C Skin scorosion, Category 10 Skin Sens. 1A Skin sensitization, Category 1 Skin Sens. 1A Skin sensitization, Category 1 </td <td></td>	
The product does not contain substances of very high concern (SVHC). 5.2. Chemical safety assessment For this preparation a chemical safety assessment has not been carried out. ECTION 16: Other information Hazard statements listed in Chapter 3 H301 Toxic if swallowed. H302 H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H330 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H330 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H330 Fatal in contact with skin. H314 Causes an allergic skin reaction. H318 Causes severe skin burns and eye damage. H330 Fatal if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. CLP categories listed in Chapter 3 Acute Tox. 3 Acute tox. 4 Acute toxicity, Category 2 Acute Tox. 4 Aquatic Chronic 1 Hazardous to the aquatic environment, acute, Category 1 Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 1 Skin Corr. 1C Skin Sens. 1A Skin sensitization, Category 1A STOT RE 2 Specific target organ toxicity - repeated exposure, Category 2 Supplemental information Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a quarante for any specific product properties and shall not establish a legally valid relationship. The information is used the product are outside the supplier's control, the user is responsible for ensuring that the requirements de the notice are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are compiled with. The information in this safety data sheet does not constitute the user's own assessment of	5.23
5.2. Chemical safety assessment For this preparation a chemical safety assessment has not been carried out. ECTION 16: Other information Hazard statements listed in Chapter 3 H301 Toxic if swallowed. H302 Harmful if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. CLP categories listed in Chapter 3 Acute Tox. 2 Acute toxicity, Category 2 Acute Tox. 3 Acute toxicity, Category 1 Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1 Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1 Skin corrosion, Category 1A Stin sensitization, Category 1A Stin sensitization, Category 1A Stin sensitization, Category 1A Hazard chronic 1 Skin sensitization, Category 1A	
For this preparation a chemical safety assessment has not been carried out. ECTION 16: Other information Hazard statements listed in Chapter 3 H301 Toxic if swallowed. H302 Harmful if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life. H410 Very toxic to aquatic environment, acute, Category 1 Aquatic Acute Tox. 4 Acute toxicity, Category 2 Acute Tox. 4 Acute toxicity. Category 1 Skin Sens. 1A Skin sensitization, Category 10 Skin Sens. 1A Skin sensitization, Category 11 Skin Sens. 1A Skin sensitization, Category 14 This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship. The information is based on our present state of knowledge. However, it should not be construed as any guarantee of techicical perf	
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Safety data sheet in accorda	ance with regula	tion (EC) No 1907/2	006	
Trade name: Marabu Aqua P	en Mega Mash 12	2pcs MNA 020		
	U	Version: 2 / GB		Date revised: 24.01.2020
Substance number: 0145900	0000100-020	Replaces Version:	1 / GB	Print date: 12.05.23
SECTION 1: Identific		substance/mi	xture and of	<u>the</u>
company/undertakin	g			
1.1. Product identifier Marabu Aqua Pen Me	ega Mash 12pcs I	MNA 020		
1.2. Relevant identified	uses of the s	ubstance or mix	ture and uses	advised against
Use of the substance/p Paint	reparation			
Identified Uses				
SU21 PC9a		s: Private households aints, thinners, paint		= consumers)
1.3. Details of the supp	lier of the safe	ety data sheet		
Address/Manufacture				
Marabu GmbH & Co. Asperger Strasse 4	KG			
71732 Tamm				
Germany Telephone no.	+49-7141/691-0	n		
Information provided				
by / telephone E-mail address of	PRSI@marabu	com		
person responsible for this SDS	TROTEINalabu			
4.4. Emergeney teleph	one number			
1.4. Emergency telepho (+49) (0)621-60-4333	33			
		<u>on</u>		
(+49) (0)621-60-4333	identifications e substance o	or mixture	Regulation (EC) N	o 1272/2008.
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(+49) (0)621-60-4333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according	identification e substance d assified hazardou g to regulation reaction mass of 2-methyl-2H-iso	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl-:	008 2H-isothiazol-3-on	e and
(+49) (0)621-60-4333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains	identification e substance o assified hazardou g to regulation reaction mass of 2-methyl-2H-ison nation	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), l	008 2H-isothiazol-3-on	e and
(+49) (0)621-60-4333 SECTION 2: Hazards 2.1. Classification of th This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental inform	identification e substance d assified hazardou g to regulation reaction mass of 2-methyl-2H-ison nation to regulation (E roduct: reaction m	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), I EU) No 528/2012	008 2H-isothiazol-3-on May produce an al	e and lergic reaction.
(+49) (0)621-60-4333 SECTION 2: Hazards 2.1. Classification of th This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental inform Labelling according form Contains a biocidal point	identification e substance d assified hazardou g to regulation reaction mass of 2-methyl-2H-ison to regulation (E roduct: reaction m ol-3-one (3:1)	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), I EU) No 528/2012 nass of 5-chloro-2-me	008 2H-isothiazol-3-on May produce an al	e and lergic reaction.
(+49) (0)621-60-4333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental inform Labelling according for Contains a biocidal por 2-methyl-2H-isothiazo 2.3. Other hazards	a identification e substance d assified hazardou g to regulation reaction mass of 2-methyl-2H-ison to regulation (E roduct: reaction m col-3-one (3:1) ave to be mention	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), l EU) No 528/2012 hass of 5-chloro-2-me ned.	008 2H-isothiazol-3-on May produce an al ethyl-2H-isothiazol-	e and lergic reaction.
(+49) (0)621-60-4333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental inform Labelling according for Contains a biocidal pu 2-methyl-2H-isothiazo 2.3. Other hazards No special hazards have	a identification e substance d assified hazardou g to regulation reaction mass of 2-methyl-2H-ison to regulation (E roduct: reaction m col-3-one (3:1) ave to be mention	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), l EU) No 528/2012 hass of 5-chloro-2-me ned.	008 2H-isothiazol-3-on May produce an al ethyl-2H-isothiazol-	e and lergic reaction.
(+49) (0)621-60-4333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental inform Labelling according for Contains a biocidal pro- 2-methyl-2H-isothiazo 2.3. Other hazards No special hazards has SECTION 3: Compose	identification e substance d assified hazardou g to regulation reaction mass of 2-methyl-2H-ison to regulation (E roduct: reaction m pol-3-one (3:1) ave to be mention sition/inform	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), l EU) No 528/2012 hass of 5-chloro-2-me ned.	008 2H-isothiazol-3-on May produce an al ethyl-2H-isothiazol-	e and lergic reaction.
(+49) (0)621-60-4333 SECTION 2: Hazards 2.1. Classification of the This product is not cla 2.2. Label elements Labelling according EUH208 Contains Supplemental inform Labelling according for Contains a biocidal pu 2-methyl-2H-isothiazo 2.3. Other hazards No special hazards has SECTION 3: Compos 3.2. Mixtures	identification e substance d assified hazardou g to regulation reaction mass of 2-methyl-2H-ison to regulation (E roduct: reaction m pol-3-one (3:1) ave to be mention sition/inform	or mixture s in accordance with n (EC) No 1272/2 of 5-chloro-2-methyl- othiazol-3-one (3:1), l EU) No 528/2012 hass of 5-chloro-2-me ned.	008 2H-isothiazol-3-on May produce an al ethyl-2H-isothiazol-	e and lergic reaction.

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rade name: Marabu Aqua P	-	Version	2 / GE			Date revised: 24.01.2020
Substance number: 0145900	0000100-020	Replace	s Versio	on: 1/GB		Print date: 12.05.23
EINECS no. Registration no. Concentration Classification (Regula	203-473-3 01-211945681 >= ation (EC) No. 12 Acute Tox. 4 STOT RE 2	1	< H302 H373	10	%	
		H-isothia	zol-3-on	e and 2-m	ethyl-2H	-isothiazol-3-one (3:1)
CAS No. Concentration Classification (Regula Concentration limits (Acute Tox. 2 Aquatic Chron Aquatic Acute Skin Sens. 1A Skin Corr. 1C Acute Tox. 2 Acute Tox. 3 Eye Dam. 1	ic 1 1		0,0015	%	
ECTION 4: Eirst aid	Eye Irrit. 2 Skin Irrit. 2 Skin Sens. 1 Aquatic Acute Aquatic Chron 1 Eye Dam. 1		>= >= M = M =	0,06 < 0,6 0,06 < 0,6 0,0015 = 100 = 100 0,6 %		
ECTION 4: First aid 4.1. Description of first		S				
After skin contact Wash with plenty of w After eye contact Separate eyelids, wa After ingestion	vater and soap. I sh the eyes thore	Do NOT us	n water (15 min.). Ir	n case of	irritation consult an oculist.
Rinse mouth thoroug medical treatment.	hly with water. If	larger amo	ounts ar	e swallowe	d or in th	e event of symptoms take
1.2. Most important syr Until now no symptor			both a	cute and	delaye	ed
4.3. Indication of any in Hints for the physicia Treat symptomaticall ECTION 5: Firefight	an / treatment		ention	and spe	cial tre	atment needed
5.1. Extinguishing med		162				

	PIX		Page
Safety data sheet in accordance with regu	lation (EC) No 1907/2006		
rade name: Marabu Aqua Pen Mega Mash	12pcs MNA 020		
rado namo. Maraba / qua r on moga maon	Version: 2/GB	Dat	e revised: 24.01.2020
Substance number: 0145900000100-020	Replaces Version: 1 / Gl		Print date: 12.05.23
	Replaces version. 17 Of	,	1 mill date: 12.00.20
In the event of fire the following can b black smoke	be released: Carbon monoxic	e (CO); Carbon die	oxide (CO2); dense
5.3. Advice for firefighters			
Other information			
Collect contaminated fire-fighting wat	ter separately, must not be di	scharged into the c	drains.
ECTION 6: Accidental release	measures		
6.1. Personal precautions, protectiv No particular measures required.	e equipment and eme	gency proced	ures
6.2. Environmental precautions No particular measures required.			
6.3. Methods and material for conta Clean preferably with a detergent - a		р	
6.4. Reference to other sections Information regarding Safe handling, see Section 8. Information regarding			protective measures,
ECTION 7: Handling and stora	age		
7.1. Precautions for safe handling			
Advice on safe handling			
Avoid skin and eye contact. Smoking	, eating and drinking shall be	prohibited in appli	cation area.
Advice on protection against fire a	and explosion		
No special measures required.			
Classification of fires / temperatur	re class / Ignition group /	Dust explosion	class
Temperature class T2			
7.2. Conditions for safe storage, ind	cluding any incompatik	oilities	
Requirements for storage rooms a			
Store in frostfree conditions.			
Store in frostfree conditions. 7.3. Specific end use(s) Paint			
7.3. Specific end use(s) Paint		-	
7.3. Specific end use(s) Paint SECTION 8: Exposure controls	/personal protectio	<u>ם</u>	
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters	/personal protectio	<u>n</u>	
 7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values 	/personal protectio	<u>n</u>	
 7.3. Specific end use(s) Paint <u>SECTION 8: Exposure controls</u> 8.1. Control parameters Exposure limit values Ethanediol 		<u>n</u>	
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values Ethanediol List EH4	40	<u>n</u>	
 7.3. Specific end use(s) Paint <u>SECTION 8: Exposure controls</u> 8.1. Control parameters Exposure limit values Ethanediol 	40	<u>n</u>	
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values Ethanediol List EH4 Type WE	40 L mg/m³	<u>n</u>	
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values Ethanediol List EH4 Type WE Value 10 Skin resorption / sensibilisation: Sk: 2 Ethanediol	40 L mg/m³	<u>n</u>	
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values Ethanediol List EH4 Type WE Value 10 Skin resorption / sensibilisation: Sk: 2 Ethanediol List EU	40 L mg/m³ 2011		A
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values Ethanediol List EH4 Type WE Value 10 Skin resorption / sensibilisation: Sk: 2 Ethanediol List EU Value 52	40 L mg/m³ 2011 mg/m³	20 ppm(\	
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values Ethanediol List EH4 Type WE Value 10 Skin resorption / sensibilisation: Sk: 2 Ethanediol List EU Value 52 Short term exposure limit 104	40 L mg/m³ 2011 mg/m³ . mg/m³		
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values Ethanediol List EH4 Type WE Value 10 Skin resorption / sensibilisation: Sk: 2 Ethanediol List EU Value 52 Short term exposure limit 104 Skin resorption / sensibilisation: Skin	40 L mg/m³ 2011 mg/m³ . mg/m³	20 ppm(\	
7.3. Specific end use(s) Paint SECTION 8: Exposure controls 8.1. Control parameters Exposure limit values Ethanediol List EH4 Type WE Value 10 Skin resorption / sensibilisation: Sk: 2 Ethanediol List EU Value 52 Short term exposure limit 104	40 L mg/m³ 2011 mg/m³ mg/m³ ; Remarks: 2000/39/EG	20 ppm(\	

barety data sheet in accordance.	with regulation (EC) No 1907/2006	
rade name: Marabu Aqua Pen Me	ega Mash 12pcs MNA 020	
	Version: 2/GB	Date revised: 24.01.2020
Substance number: 01459000001	00-020 Replaces Version: 1 / GB	Print date: 12.05.23
Туре	WEL	
Value Status: 2011	10 mg/m³	
Other information		
There are not known any fu	•	
Derived No/Minimal Effec	t Levels (DNEL/DMEL)	
Ethanediol		
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action Concentration	Local effects 35	mg/m³
Concentration	33	mg/ms
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	106	mg/kg
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action Concentration	Local effects 7	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	dermal	
Mode of action	Systemic effects	
Concentration	53	mg/kg
Predicted No Effect Conc	entration (PNEC)	
Ethanediol		
Type of value	PNEC	
Туре	Freshwater	
Concentration	10	mg/l
Type of value	PNEC	
Туре	Saltwater	
Concentration	1	mg/l
Type of value	PNEC	
Туре	Water (intermittent release)	
Concentration	10	mg/l
Type of value	PNEC	
Туре	Sewage treatment plant (STP)	<u>,</u>
Concentration	199,5	mg/l
Type of value	PNEC	
Туре	Freshwater sediment	
Concentration	37	mg/kg

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alory data ellect in c	accordance with re	gulut				
rade name: Marabu	Aqua Pen Mega Ma					Mar
		`	Version:	2 / GB		Date revised: 24.01.202
Substance number: 0	145900000100-020		Replaces	Version:	1 / GB	Print date: 12.05.2
Type of value	F	PNEC				
Туре		-	sediment			
Concentration			3,7			mg/kg
Type of value	F	PNEC				
Туре		Soil				
Concentration			1,53			mg/kg
.2. Exposure cor	ntrols					
Exposure cont						
Provide adequ	uate ventilation.					
Respiratory pr	otection					
Not necessary	1.					
Hand protection	n					
There is no or individual or c For prolonged Material thickr Breakthrough The breakthro The instruction replacement n Gloves should Always ensure The performan maintenance. Barrier creams	ombination of chemi l or repeated handlin ness > time < bugh time must be gr ns and information p nust be followed. d be replaced regular e that gloves are free nce or effectiveness s may help to protect e has occurred.	combin icals. Ig nitril 0,4 30 reater f rovide rly ance from of the	nation of n e rubber g 5 n than the e d by the g l if there is defects an glove ma	naterials Iloves wi nm nd use ti love mar any sigr nd that th y be redu	th textile me of the nufacture n of dama ley are st uced by p	give unlimited resistance to any undergloves are required. e product. er on use, storage, maintenance and age to the glove material. tored and used correctly. ohysical/ chemical damage and poor hey should however not be applied
ECTION 9: Phy	<u>/sical and che</u>	emic	al prop	oerties	<u>i</u>	
0.1. Information o			l chemio	cal pro	perties	
Physical state		iquid				
Colour		coloure				
Odour	C	odourle	ess			
Melting point						
Remarks		not det	ermined			
Freezing point	r	not det	ermined			
Remarks	-			a rana	3	
Remarks	or initial boiling po	oint a	nd boilin	ig range		
Remarks Boiling point o Value		oint a appr.	100			°C
Remarks Boiling point o Value Pressure	a	appr.	100 1.013	hPa		°C
Remarks Boiling point o Value	a	appr.	100			°C

Trade name: Marabu Aqua Pen Meg	ja Mash	12pcs MNA 02 Version: 2				
Substance number: 014590000010	0-020	Replaces V		1 / GB		Date revised: 24.01.2020 Print date: 12.05.23
Upper and lower explosive	limits					
Lower explosion limit	app	r. 3,2		•	%(V)	
Upper explosion limit	app			•	%(V)	
Source	Lite	rature value				
Flash point	N	a mar l'a a la la				
Remarks	NOT	applicable				
Ignition temperature						
Value Source	app Lite	r. 410 rature value			°C	
Viscosity	Lite					
Remarks						
Remarks	not	determined				
Vapour pressure						
Value	app	r. 23		1	пРа	
Temperature		20	°C			
Method		ue taken from t	the litera	ture		
Density and/or relative den	-					
Remarks	not	determined				
Relative vapour density						
Remarks	not	determined				
9.2. Other information						
Odour threshold						
Remarks	No	data available				
Evaporation rate (ether = 1)):					
Remarks	-	determined				
Solubility in water						
Remarks	mis	cible				
Other information						
None known						
SECTION 10: Stability and	1 roac	+i\/i+\/				
10.1. Reactivity	reac	<u>LIVILY</u>				
None						
10.2. Chemical stability No hazardous reactions know	wn.					
10.3. Possibility of hazardous No hazardous reactions know		ions				
10.4. Conditions to avoid No hazardous reactions know	wn.					
10.5. Incompatible materials None						
10.6. Hazardous decomposit No hazardous decomposition						

MSDS for #24547 - MARB AQU/ Safety data sheet in accordan	A PEN GRA	PIX	07/2006	Page
rade name: Marabu Aqua Per	C			Date revised: 24.01.202
Substance number: 014590000	0100-020	Replaces Vers		Print date: 12.05.23
Substance number. 01439000	0100-020			
11.1 Information on haza	rd classe	s as defined in	Regulation (E	C) No 1272/2008
Acute oral toxicity				
Remarks			, the classification of	criteria are not met.
Acute oral toxicity (Co	mponents)			
Ethanediol Species LD50	rat	7712	mg/ł	×g
Acute dermal toxicity Remarks	Based	h on available data	the classification (criteria are not met.
Acute dermal toxicity (Componer	113)		
Ethanediol Species LD50	rabbit >	9530	mg/ł	٨g
Acute inhalational toxi	city			
Remarks	Based	d on available data	, the classification of	criteria are not met.
Skin corrosion/irritatio	n			
Remarks	Based	d on available data	, the classification of	criteria are not met.
Serious eye damage/ir	ritation			
Remarks	Based	d on available data	, the classification of	criteria are not met.
Sensitization				
Remarks	Based	d on available data	, the classification of	criteria are not met.
Mutagenicity				
Remarks	Based	d on available data	, the classification of	criteria are not met.
Reproductive toxicity				
Remarks	Based	d on available data	, the classification of	criteria are not met.
Carcinogenicity				
Remarks	Based	d on available data	, the classification of	criteria are not met.
Specific Target Organ	Toxicity (S	стот)		
Single exposure				
Remarks	Based	d on available data	, the classification of	criteria are not met.
Repeated exposure				
Remarks	Based	d on available data	, the classification of	criteria are not met.
Aspiration hazard				
Based on available data	a, the classif	ication criteria are	not met.	
Experience in practice				
limit may result in adver and adverse effects on dizziness, fatigue, musc Solvents may cause so contact with the mixture dermatitis and absorptio reversible damage. Inge	se health ef kidney, liver cular weakne me of the ab may cause on through the estion may c mediate effe	fects such as mucc and central nervou ess, drowsiness an ove effects by abs removal of natural ne skin. The liquid sause nausea, diarr cts and also chroni	bus membrane and us system. Sympto d in extreme cases orption through the fat from the skin re splashed in the eye thoea and vomiting ic effects of compo	stated occupational exposure I respiratory system irritation ms and signs include headache, s, loss of consciousness. e skin. Repeated or prolonged esulting in non-allergic contact es may cause irritation and l. This takes into account, where nents from short-term and d eye contact.
Other information				
There are no data availa	able on the r	mixture itself.		
				P Regulation (EC) No

The mixture has been assessed following the additivity method of the CLP Regulation (EC) No

ISDS for #24547 - MARB AQUA I		(EC) No 1907/2	2006	Page 🐣 🗠
Safety data sheet in accordance	with regulation	(20) NO 1907/2		
rade name: Marabu Aqua Pen M	lega Mash 12pcs	MNA 020		ΔV
	Ver	sion: 2/GB		Date revised: 24.01.2020
Substance number: 0145900000	100-020 Rep	places Version:	1 / GB	Print date: 12.05.23
1272/2008 and classified	for toxicological h	azards accordir	alv.	
			.9.9.	
ECTION 12: Ecologica	l informatio	<u>n</u>		
2.1. Toxicity				
General information				
There are no data availab	le on the mixture i	itself.Do not allo	ow to enter dra	ins or water courses.The
mixture has been assesse	ed following the su	ummation metho		Regulation (EC) No 1272/2008
and is not classified as da	-	nvironment.		
Fish toxicity (Componen	ts)			
Ethanediol	Eath and minut			
Species LC50	Fathead minr 8050	now (Pimephale	s promeias) mg/l	
Duration of exposure	96	h	iiig/i	
reaction mass of 5-chloro	-2-methyl-2H-iso	thiazol-3-one a	and 2-methyl-	2H-isothiazol-3-one (3:1)
Species	rainbow trout	(Oncorhynchus		
LC50 Duration of exposure	0,188 96	s h	mg/l	
Daphnia toxicity (Compo				
Ethanediol	,			
Species	Daphnia mag	na		
	> 1000	0	mg/l	
Duration of exposure	24	h		
reaction mass of 5-chloro Species	Daphnia mag		and 2-methyl-	2H-isothiazol-3-one (3:1)
EC50	0,126		mg/l	
Duration of exposure	48	h	-	
Algae toxicity (Compone	nts)			
reaction mass of 5-chloro	-2-methyl-2H-iso	thiazol-3-one a	and 2-methyl-	2H-isothiazol-3-one (3:1)
Species EC50		capricornutum	mal	
Duration of exposure	0,027 72	h	mg/l	
•	adability			
12.2. Persistence and degr General information	auabiiity			
There are no data availab	le on the mixture i	iteolf		
		13011.		
12.3. Bioaccumulative pote	ential			
General information		· · 16		
There are no data availab	le on the mixture	itself.		
12.4. Mobility in soil				
General information				
There are no data availab	le on the mixture	itself.		
12.5. Results of PBT and v	PvB assessme	ent		
General information				
There are no data availab	le on the mixture i	itself.		
12.7. Other adverse effects				
General information				

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 MSDS for #24547 - MARB AQUA PEN GRAPI Safety data sheet in accordance with regula	X ation (EC) No 1907/2006	Page	
Trade name: Marabu Aqua Pen Mega Mash 1		Marabu	
	Version: 2 / GB	Date revised: 24.01.2020	
Substance number: 0145900000100-020	Replaces Version: 1 / GB	Print date: 12.05.23	

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Do not allow to enter drains or water courses. Dispose of waste according to applicable legislation. Dispose of as hazardous waste.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste. Completely emptied packagings can be given for recycling.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Subsidiary risk		-	-
Label			
14.4. Packing group	-	-	-
Transport category	0		
14.5. Environmental hazards		no	
	-		-

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

no

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

voc

VOC (EU)

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Version: 2 / GB Date revised: 24.01.202	rade name: Marabu Aqua Pen	Mega Mash 1	2pcs MNA 020		
ubstance number: 014590000100-020 Replaces Version: 1 / GB Print date: 12.05.2 Other information The product does not contain substances of very high concern (SVHC). 5.7 Chemical safety assessment For this preparation a chemical safety assessment has not been carried out. Email Concern (SVHC). 5.7 Email Statements listed in Chapter 3 H301 Toxic if swallowed. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if nohaled. H330 Very toxic to aquatic life. H410 Very toxic to aquatic life. H410 Very toxic to aquatic life. H410 Very toxic to aquatic life. Acute Tox. 3 Acute toxicity, Category 2 Acute Tox. 4 Acute toxicity, Category 1 Aquatic Chronic 1 Hazardous to the aquatic environment, acute, Category 1 Eye Dam. 1 Serious eye damage, Category 1A Stin corrison, Category 1A Stin corrison, Category 1A Stin corrison, Category 1A Stin corrison, Category 1A		-			Date revised: 24.01.2020
The product does not contain substances of very high concern (SVHC). 5.2. Chemical safety assessment For this preparation a chemical safety assessment has not been carried out. ECTION 16: Other information Hazard statements listed in Chapter 3 H301 Toxic if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H330 Fatal in contact with skin. H317 May cause an allergic skin reaction. H318 Causes severe skin burns and eye damage. H330 Fatal if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. CLP categories listed in Chapter 3 Acute toxicity, Category 2 Acute Tox. 2 Acute toxicity, Category 4 Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1 Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 2 Skin Corr. 1C Skin corrosion, Category 1 Skin corrosion, Category 10 Skin sensitization, Category 10 Skin sens. 1A Skin sensitization, Categ	Substance number: 014590000	0100-020	Replaces Versio	n: 1/GB	Print date: 12.05.23
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	C9a	•	paints, thinners, pain	t removers	
1.3. Deta	ails of the sup	plier of the saf	fety data sheet		
	ress/Manufactu				
	larabu GmbH & C				
A: 7	sperger Strasse 4 1732 Tamm				
	ermany				
	elephone no.	+49-7141/691			
	iformation provide y / telephone	d Department pr	oduct safety		
	-mail address of	PRSI@marab	u.com		
	erson responsible				
	or this SDS				
	ergency teleph				
(+	-49) (0)621-60-433	333			
()					
	, , ,		ion		
ECTIO	N 2: Hazard	s identificati			
ECTIO	N 2: Hazard	s identificati	or mixture	Regulation (EC) N	o 1272/2008.
ECTIO 2.1. Clas	N 2: Hazard ssification of t	s identificati		n Regulation (EC) N	o 1272/2008.
SECTIO 2.1. Clas TI 2.2. Lab	N 2: Hazard ssification of t his product is not el elements	s identificati he substance classified hazardou	or mixture us in accordance with		o 1272/2008.
ECTIO 2.1. Clas ⊤ 2.2. Lab Lab	N 2: Hazard ssification of t his product is not el elements elling accordi	s identificati	or mixture us in accordance with on (EC) No 1272/2	2008	
ECTIO 2.1. Clas T 2.2. Lab Lab	N 2: Hazard ssification of t his product is not el elements	s identificati he substance classified hazardou ng to regulatio Disodium 2-(2	or mixture us in accordance with on (EC) No 1272/2 2,4,5,7-tetrabromo-6-0	2008 bxido-3-oxoxanthen	-9-yl)benzoate, reaction
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ECTIO 2.1. Clas TI 2.2. Lab Lab E	N 2: Hazard ssification of t his product is not el elements elling accordi	s identificati he substance classified hazardou ng to regulatio Disodium 2-(2 mass of 5-chlo (3:1), May pro	or mixture us in accordance with on (EC) No 1272/2 2,4,5,7-tetrabromo-6-0	2008 bxido-3-oxoxanthen hiazol-3-one and 2-r	-9-yl)benzoate, reaction
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ECTIO 2.1. Clas TI 2.2. Lab Lab E Sup Lab	N 2: Hazard ssification of t his product is not of el elements elling accordi UH208 Contains plemental infor elling according	s identificati he substance classified hazardou ng to regulatio Disodium 2-(2 mass of 5-chlo (3:1), May pro- mation g to regulation (or mixture us in accordance with on (EC) No 1272/2 2,4,5,7-tetrabromo-6-c pro-2-methyl-2H-isoth duce an allergic reac (EU) No 528/2012	2008 Dxido-3-oxoxanthen hiazol-3-one and 2-r tion.	-9-yl)benzoate, reaction nethyl-2H-isothiazol-3-one
SECTIO 2.1. Clas Ti 2.2. Lab Lab E Sup Lab	N 2: Hazard ssification of t his product is not of el elements elling accordi UH208 Contains plemental infor elling according	s identificati	or mixture us in accordance with on (EC) No 1272/2 4,4,5,7-tetrabromo-6- pro-2-methyl-2H-isoth duce an allergic reac	2008 Dxido-3-oxoxanthen hiazol-3-one and 2-r tion.	-9-yl)benzoate, reaction nethyl-2H-isothiazol-3-one
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SECTIO 2.1. Clas TI 2.2. Lab Lab E Sup Lab C 2- 2.3. Oth N	N 2: Hazard sification of t his product is not a el elements elling accordin UH208 Contains plemental infor elling according ontains a biocidal methyl-2H-isothia er hazards o special hazards	s identification the substance classified hazardou ng to regulation Disodium 2-(2 mass of 5-chlor (3:1), May pro- mation g to regulation (product: reaction re- izol-3-one (3:1) have to be mention	or mixture us in accordance with on (EC) No 1272/2 4,4,5,7-tetrabromo-6-c pro-2-methyl-2H-isoth duce an allergic reac (EU) No 528/2012 mass of 5-chloro-2-m oned.	2008 Diazol-3-oxoxanthen iazol-3-one and 2-r tion. hethyl-2H-isothiazol-	-9-yl)benzoate, reaction nethyl-2H-isothiazol-3-one
ECTIO 2.1. Clas TI 2.2. Lab Lab E Sup Lab C 2. 2.3. Oth N SECTIO	N 2: Hazard sification of t his product is not el elements elling accordi UH208 Contains plemental infor elling according ontains a biocidal methyl-2H-isothia er hazards o special hazards	s identification the substance classified hazardou ng to regulation Disodium 2-(2 mass of 5-chlor (3:1), May pro- mation g to regulation (product: reaction re- izol-3-one (3:1) have to be mention	or mixture us in accordance with on (EC) No 1272/2 4,4,5,7-tetrabromo-6-coro-2-methyl-2H-isoth duce an allergic reac (EU) No 528/2012 mass of 5-chloro-2-m	2008 Diazol-3-oxoxanthen iazol-3-one and 2-r tion. hethyl-2H-isothiazol-	-9-yl)benzoate, reaction nethyl-2H-isothiazol-3-one
ECTIO 2.1. Clas TI 2.2. Lab Lab E Sup Lab C 2. 2.3. Oth N SECTIO	N 2: Hazard sification of t his product is not el elements elling accordi UH208 Contains plemental infor elling according ontains a biocidal methyl-2H-isothia er hazards o special hazards	s identification the substance classified hazardou ng to regulation Disodium 2-(2 mass of 5-chlor (3:1), May pro- mation g to regulation (product: reaction re- izol-3-one (3:1) have to be mention	or mixture us in accordance with on (EC) No 1272/2 4,4,5,7-tetrabromo-6-c pro-2-methyl-2H-isoth duce an allergic reac (EU) No 528/2012 mass of 5-chloro-2-m oned.	2008 Diazol-3-oxoxanthen iazol-3-one and 2-r tion. hethyl-2H-isothiazol-	-9-yl)benzoate, reaction nethyl-2H-isothiazol-3-one
5ECTIO 2.1. Clas TI 2.2. Lab Lab C 2. 2.3. Oth N 5ECTIO 3.2. Mix	N 2: Hazard sification of t his product is not el elements elling accordi UH208 Contains plemental infor elling according ontains a biocidal methyl-2H-isothia er hazards o special hazards	s identification he substance classified hazardou ng to regulation Disodium 2-(2 mass of 5-chlor (3:1), May pro- mation g to regulation (product: reaction re- izol-3-one (3:1) have to be mention psition/inform	or mixture us in accordance with on (EC) No 1272/2 4,4,5,7-tetrabromo-6-c pro-2-methyl-2H-isoth duce an allergic reac (EU) No 528/2012 mass of 5-chloro-2-m oned.	2008 Diazol-3-oxoxanthen iazol-3-one and 2-r tion. hethyl-2H-isothiazol-	-9-yl)benzoate, reaction nethyl-2H-isothiazol-3-one

ade name: Marabu Aqua substance number: 01459	Ve	ersion:	2 / GB	1 / GB		Marabu Date revised: 24.01.2020 Print date: 12.05.23
CAS No. EINECS no. Registration no. Concentration Classification (Reg	107-21-1 203-473-3 01-2119456816-28 >= 1 ulation (EC) No. 1272/2 Acute Tox. 4 STOT RE 2	008)	< H302 H373	10	%	
Disodium 2-(2,4,5,7 CAS No.	-tetrabromo-6-oxido-3 17372-87-1			-yl)benzo	oate	
EINECS no. Concentration Classification (Reg	241-409-6 >= 0,1 ulation (EC) No. 1272/2 Skin Sens. 1 Eve Irrit. 2	008)	< H317 H319	I	%	
reaction mass of 5- CAS No.	chloro-2-methyl-2H-is 55965-84-9	othiazo	ol-3-one	and 2-me	ethyl-2H	-isothiazol-3-one (3:1)
Classification (Reg	ulation (EC) No. 1272/2 Acute Tox. 2 Aquatic Chronic 1 Aquatic Acute 1 Skin Sens. 1A Skin Corr. 1C Acute Tox. 2 Acute Tox. 3 Eye Dam. 1		H330 H410 H400 H317 H314 H310 H301 H318			
Concentration limit	Aquatic Acute 1 Aquatic Chronic	1272/2 H314 H319 H315 H317 H410 H410	>= 0, >= 0,	06 < 0,6 06 < 0,6 0015 00		
	1 Eye Dam. 1	H318	>= 0,	6 %		
After eye contact	st aid measures f water and soap. Do N					irritation consult an oculist.
After ingestion		-				e event of symptoms take
	ymptoms and effe	cts, b	oth ac	ute and	delaye	d
.3. Indication of any			ntion o			

MSDS for #24547 - MARB AQUA PEN GRAPIX
Safety data shoot in accordance with regulation (EC) No 1007/2006
Carety data Sheet in accordance with regulation (EC) No 150//2000

Trade name: Marabu Aqua Pen Mega Mash 12pcs MNA 023

Version: 2/GB

Replaces Version: 1 / GB

Substance number: 0145900000100-023

Date revised: 24.01.2020 Print date: 12.05.23

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Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide, Foam, Sand, Water

5.2. Special hazards arising from the substance or mixture In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); dense black smoke; Nitrogen oxides (NOx); Sulphur oxides

5.3. Advice for firefighters

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures No particular measures required.

6.2. Environmental precautions

No particular measures required.

- 6.3. Methods and material for containment and cleaning up Clean preferably with a detergent - avoid use of solvents.
- 6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Advice on safe handling

Avoid skin and eye contact. Smoking, eating and drinking shall be prohibited in application area.

Advice on protection against fire and explosion

No special measures required.

Classification of fires / temperature class / Ignition group / Dust explosion class Temperature class T2

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels Store in frostfree conditions.

7.3. Specific end use(s)

Paint

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Ethanediol List EH40 Type WEL

ade name: Marabu Aqua Pen Mega ubstance number: 0145900000100		2pcs MNA 023 Version: 2 / GB Replaces Version: 1 /	GB	Date revised: Print c	Marab 24.01.2020 late: 12.05.23
Value	10	mg/m³			
Skin resorption / sensibilisatio	n: Sk: 20	011			
Ethanediol					
List	EU		00		
Value	52	mg/m ³	20	ppm(V)	
Short term exposure limit Skin resorption / sensibilisatio	104 n: Skin;	mg/m ³ Remarks: 2000/39/EG	40	ppm(V)	
Glycerol					
List	EH40)			
Туре	WEL				
Value Status: 2011	10	mg/m³			
Other information					
There are not known any furth	ner contro	ol parameters.			
Derived No/Minimal Effect L	evels ([DNEL/DMEL)			
Ethanediol					
Type of value		ed No Effect Level (DNE	EL)		
Reference group	Work	ker			
Duration of exposure	Long				
Route of exposure	inhala	ative			
Mode of action	Local	l effects			
Concentration		35		mg/m³	
Type of value		ved No Effect Level (DNE	EL)		
Reference group	Work				
Duration of exposure	Long				
Route of exposure	derm				
Mode of action	Syste	emic effects			
Concentration		106		mg/kg	
Type of value	Deriv	ed No Effect Level (DNE	EL)		
Reference group	Cons	sumer			
Duration of exposure	Long	term			
Route of exposure	inhala				
Mode of action	Local	l effects			
Concentration		7		mg/m³	
Type of value		ved No Effect Level (DNE	EL)		
Reference group		sumer			
Duration of exposure	Long				
Route of exposure	derm				
Mode of action Concentration	Syste	emic effects 53		mg/kg	
Predicted No Effect Concen	tration	(PNEC)			
Ethanediol					
Type of value	PNE	С			
Туре		hwater			
Concentration		10		mg/l	
Type of value	PNE	С			
Туре	Saltw	vater			
Concentration		1		mg/l	
Type of value	PNE	\sim			

Page 54 of 71

atoty data shoot in	ARB AQUA PEN GRA	\PIX julation (EC) No 1907/2006	Page == ···
aloty data sheet m			
rade name: Marabi	u Aqua Pen Mega Mas	h 12pcs MNA 023	
		Version: 2 / GB	Marabu Date revised: 24.01.2020
	044500000400 000		
ubstance number:	0145900000100-023	Replaces Version: 1 / GE	5 Fint date. 12.05.23
Туре	V	/ater (intermittent release)	
Concentratio	on	10	mg/l
Type of value	e P	NEC	
Туре		ewage treatment plant (STP)	
Concentratio	on	199,5	mg/l
Type of value	e P	NEC	
Туре		reshwater sediment	
Concentratio		37	mg/kg
			0.0
Type of value	e P	NEC	
Туре		larine sediment	
Concentratio	on	3,7	mg/kg
Type of value		NEC	
Туре		oil	
Concentratio	on	1,53	mg/kg
	ıry. ion ıry. tensive contact wear p		
Not necessa Hand protecti Not necessa In case of int There is no c individual or For prolonge Material thicl Breakthroug The breakthr The instructive replacement Gloves shou Always ensu The perform maintenance	ary. ion ary. tensive contact wear p tensive contact wear p tensive contact wear p tensive contact wear p combination of chemic ed or repeated handling kness > h time < rough time must be gre ons and information pr must be followed. Id be replaced regularly ire that gloves are free ance or effectiveness of a.	combination of materials that will cals. g nitrile rubber gloves with textile 0,5 mm 30 min eater than the end use time of the ovided by the glove manufacture ly and if there is any sign of dam from defects and that they are of the glove may be reduced by	he product. rer on use, storage, maintenance and nage to the glove material. stored and used correctly. physical/ chemical damage and poor
Not necessa Hand protecti Not necessa In case of int There is no c individual or For prolonge Material thicl Breakthroug The breakthr The instructive replacement Gloves shou Always ensu The perform maintenance Barrier crear	iry. ion Iry. tensive contact wear p one glove material or c combination of chemic ed or repeated handling kness > h time < rough time must be gre ons and information pr must be followed. Id be replaced regularly ire that gloves are free ance or effectiveness of ms may help to protect ure has occurred.	combination of materials that will cals. g nitrile rubber gloves with textile 0,5 mm 30 min eater than the end use time of the ovided by the glove manufacture ly and if there is any sign of dam from defects and that they are of the glove may be reduced by	e undergloves are required. he product. rer on use, storage, maintenance and nage to the glove material. stored and used correctly.
Not necessa Hand protecti Not necessa In case of int There is no c For prolonge Material thick Breakthroug The breakthr The instruction replacement Gloves shou Always ensu The perform maintenance Barrier crear once exposu	iry. ion Iry. tensive contact wear p one glove material or c combination of chemic d or repeated handling kness > h time < rough time must be gre ons and information pr must be followed. Id be replaced regularly tre that gloves are free ance or effectiveness of ms may help to protect tre has occurred. on	combination of materials that will cals. g nitrile rubber gloves with textile 0,5 mm 30 min eater than the end use time of the ovided by the glove manufacture ly and if there is any sign of dam from defects and that they are of the glove may be reduced by	e undergloves are required. he product. rer on use, storage, maintenance and nage to the glove material. stored and used correctly. physical/ chemical damage and poor
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Not necessa Hand protecti Not necessa In case of int There is no c individual or For prolonge Material thick Breakthroug The breakthr The instruction replacement Gloves shou Always ensu The perform maintenance Barrier crear once exposu Eye protection Not necessa Body protection	iry. ion Iry. tensive contact wear p one glove material or c combination of chemic d or repeated handling kness > h time < rough time must be gre ons and information pr must be followed. Id be replaced regularly the that gloves are free ance or effectiveness of a. ms may help to protect the has occurred. on iry. ion he.	combination of materials that will cals. g nitrile rubber gloves with textile 0,5 mm 30 min eater than the end use time of the ovided by the glove manufacture ly and if there is any sign of dam from defects and that they are of the glove may be reduced by	e undergloves are required. he product. rer on use, storage, maintenance and nage to the glove material. stored and used correctly. physical/ chemical damage and poor
Not necessa Hand protecti Not necessa In case of int There is no o For prolonge Material thick Breakthroug The breakthr The instruction replacement Gloves shou Always ensu The perform maintenance Barrier crear once exposu Eye protectio Not necessa Body protectio Not applicab ECTION 9: Ph	ion iry. tensive contact wear p one glove material or o combination of chemic ed or repeated handling kness > h time < rough time must be gre ons and information pr must be followed. Id be replaced regularly ire that gloves are free ance or effectiveness of ance on basic physical	mical properties	e undergloves are required. he product. rer on use, storage, maintenance and nage to the glove material. stored and used correctly. physical/ chemical damage and poor they should however not be applied
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Frade name: Marabu Aqua Pen Mega N		Version:	2 / GB			Date revised:	
Substance number: 0145900000100-0	23	Replaces	Version:	1 / GB		Print da	ate: 12.05.23
Remarks	not de	termined					
Freezing point							
Remarks		termined					
Boiling point or initial boiling	-		ng rang	e			
Value Pressure	appr.	100 1.013	hPa		°C		
Source	Literat	ure value	in a				
Flammability Not applicable							
Upper and lower explosive lin	nite						
Lower explosion limit	appr.	3,2			%(V)		
Upper explosion limit Source	appr.				%(V)		
Flash point							
Remarks	Not ap	plicable					
Ignition temperature	•	•					
Value Source	appr. Literat	410 ure value			°C		
Viscosity							
Remarks Remarks	not de	termined					
Vapour pressure							
Value	appr.	23			hPa		
Temperature Method	Value	20 tokon from	°C	ot			
		taken from		ature			
Density and/or relative densit Remarks	-	termined					
Relative vapour density	not de	lemmeu					
Remarks	not de	termined					
	not de	termined					
9.2. Other information							
Odour threshold	N		_				
Remarks	No da	ta available	e				
Evaporation rate (ether = 1) :	not do	termined					
Remarks Solubility in water	not de	lemmeu					
Remarks	miscib						
Other information	miscib						
None known							
		- 4.					
SECTION 10: Stability and r	eactr	<u>vity</u>					
10.1. Reactivity None							
10.2. Chemical stability No hazardous reactions known.							
10.3. Possibility of hazardous r							

MSDS for #24547 - MARB AQUA PE	EN GRAI	PIX			Page == of
Safety data sheet in accordance v	vith regu	Ilation (EC) No	1907/2	006	
Trade name: Marabu Aqua Pen Me	aa Mach	12pcc MNIA 02	22		
Trade fiame. Marabu Aqua Ferrine	ya masi	Version: 2			Marabu Marabu
					Date revised: 24.01.2020
Substance number: 014590000010	00-023	Replaces V	ersion:	1 / GB	Print date: 12.05.23
10.4. Conditions to avoid No hazardous reactions kno	own.				
10.5. Incompatible materials None	i				
10.6. Hazardous decomposi No hazardous decompositio					
<u>SECTION 11: Toxicologic</u>					
11.1 Information on hazard of	classes	s as defined	in Reg	ulation (EC)	No 1272/2008
Acute oral toxicity					
Remarks	Based	l on available da	ata, the o	classification crit	eria are not met.
Acute oral toxicity (Compo	onents)				
Ethanediol	•				
Species	rat				
LD50		7712		mg/kg	
Acute dermal toxicity					
Remarks	Based	l on available da	ata, the o	classification crit	eria are not met.
Acute dermal toxicity (Cor	nponer	nts)			
Ethanediol	•	,			
Species LD50	rabbit >	9530		mg/kg	
Acute inhalational toxicity				0.0	
Remarks		l on available da	ata, the o	classification crit	eria are not met.
Skin corrosion/irritation	20000				
Remarks	Based	l on available da	ata the i	classification crit	eria are not met.
Serious eye damage/irritat					
Remarks		l on available dr	ata tha	alaccification crit	eria are not met.
Sensitization	Daseu	i un avaliable ua	ala, ine i	lassification chi	ena are not met.
	Deeee	l an available da	ata tha	localfication arit	aria ara nat mat
Remarks	Dased	i on available da	ata, the o	hassincation chi	eria are not met.
Mutagenicity					
Remarks	Based	i on available da	ata, the o	classification crit	eria are not met.
Reproductive toxicity	-				
Remarks	Based	l on available da	ata, the o	classification crit	eria are not met.
Carcinogenicity					
Remarks	Based	l on available da	ata, the o	classification crit	eria are not met.
Specific Target Organ Tox	icity (S	тот)			
Single exposure					
Remarks	Based	l on available da	ata, the o	classification crit	eria are not met.
Repeated exposure Remarks	Based	l on available da	ata, the o	classification crit	eria are not met.
Aspiration hazard Based on available data, the	e classifi	cation criteria a	re not m	et.	
Experience in practice					
Exposure to component sol limit may result in adverse h	nealth eff	ects such as m	ucous m	embrane and re	
	, <u>.</u> .			- ,	

ISDS for #24547 - MARB AQUA F	PEN GRAP	IX.			Page
Safety data sheet in accordance	with regul	ation (EC) No 1907/2	2006	
rade name: Marabu Aqua Pen M	lega Mash	12pcs MN	A 023		
	-	Version	: 2/GB		Date revised: 24.01.2020
Substance number: 0145900000	100-023	Replace	es Version:	1 / GB	Print date: 12.05.23
Solvents may cause some contact with the mixture m dermatitis and absorption reversible damage. Ingest known, delayed and imme long-term exposure by ora	e of the abo hay cause re through the ion may ca ediate effect	ve effects emoval of skin. The use nause is and also	by absorption natural fat f liquid splas a, diarrhoea chronic eff	on through rom the sk shed in the a and vom ects of cor	ases, loss of consciousness. the skin. Repeated or prolonged in resulting in non-allergic contact eyes may cause irritation and iting. This takes into account, where mponents from short-term and and eye contact.
Other information					
There are no data availab The mixture has been ass 1272/2008 and classified f	essed follov for toxicolog	wing the a gical hazar	dditivity me		CLP Regulation (EC) No
ECTION 12: Ecologica	<u>i inform</u>	ation			
General information					
	le on the m	ivture iteel	f Do not alla	w to optor	drains or water courses.The
	d following	the summ	ation metho		LP Regulation (EC) No 1272/2008
Fish toxicity (Componen	ts)				
Ethanediol					
Species	Fathea		(Pimephale	s promelas	s)
LC50		8050	F	1	mg/l
Duration of exposure	2 mothul (96 Nu isothia	h 		hud 24 iaathiazal 2 ana (2:1)
Species LC50			corhynchus	s mykiss)	h yl-2H-isothiazol-3-one (3:1) mg/l
		96	h-		5
Duration of exposure		96	h		
Duration of exposure Daphnia toxicity (Compo	nents)	90	n		
•	onents)	90	n		
Daphnia toxicity (Compo	-	a magna	n		
Daphnia toxicity (Compo Ethanediol Species	-	a magna 10000		,	mg/l
Daphnia toxicity (Compo Ethanediol Species Duration of exposure	Daphni >	a magna 10000 24	h		0
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro	Daphni > -2-methyl-2	a magna 10000 24 2 H-isothia	h		mg/l h yl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure	Daphni > - 2-methyl-2 Daphni	a magna 10000 24	h	and 2-met	0
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro- Species	Daphni > - 2-methyl-2 Daphni	a magna 10000 24 2 H-isothia a magna	h	and 2-met	hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50	Daphni > -2-methyl-2 Daphni	a magna 10000 24 2 H-isothia a magna 0,126	h zol-3-one a	and 2-met	hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia	h zol-3-one a h zol-3-one a	and 2-meti	hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi	h zol-3-one a h	and 2-meti n and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species EC50	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2	a magna 10000 24 2H-isothia a magna 0,126 48 2H-isothia strum capt 0,027	h zol-3-one a h zol-3-one a	and 2-meti n and 2-meti	h yl-2H-isothiazol-3-one (3:1) mg/l
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species EC50 Duration of exposure	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2 Selena	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi 0,027 72	h zol-3-one a h zol-3-one a	and 2-meti n and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species EC50 Duration of exposure	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2 Selena	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi 0,027 72	h zol-3-one a h zol-3-one a	and 2-meti n and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species EC50 Duration of exposure 12.2. Persistence and degr General information	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2 Selena adability	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi 0,027 72	h zol-3-one a h zol-3-one a iccornutum h	and 2-meti n and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species EC50 Duration of exposure 12.2. Persistence and degr	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2 Selena adability	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi 0,027 72	h zol-3-one a h zol-3-one a iccornutum h	and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species EC50 Duration of exposure 12.2. Persistence and degr General information There are no data availab	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2 Selena: adability le on the m	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi 0,027 72	h zol-3-one a h zol-3-one a iccornutum h	and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species EC50 Duration of exposure 12.2. Persistence and degr General information There are no data availab	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2 Selenas adability le on the m	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi 0,027 72	h zol-3-one a h zol-3-one a ricornutum h	and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro- Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro- Species EC50 Duration of exposure 12.2. Persistence and degr General information There are no data availab 12.3. Bioaccumulative pote General information There are no data availab	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2 Selenas adability le on the m	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi 0,027 72	h zol-3-one a h zol-3-one a ricornutum h	and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)
Daphnia toxicity (Compo Ethanediol Species Duration of exposure reaction mass of 5-chloro Species EC50 Duration of exposure Algae toxicity (Compone reaction mass of 5-chloro Species EC50 Duration of exposure 12.2. Persistence and degr General information There are no data availab 12.3. Bioaccumulative pote General information	Daphni > -2-methyl-2 Daphni nts) -2-methyl-2 Selenas adability le on the m	a magna 10000 24 2 H-isothia a magna 0,126 48 2 H-isothia strum capi 0,027 72	h zol-3-one a h zol-3-one a ricornutum h	and 2-meti	hyl-2H-isothiazol-3-one (3:1) mg/l hyl-2H-isothiazol-3-one (3:1)

	5
MSDS for #24547 - MARB AQUA PEN GRAPIX	Page
Safety data sheet in accordance with regulation (EC) No 1907/2006 Trade name: Marabu Aqua Pen Mega Mash 12pcs MNA 023 Version: 2 / GB	Date revised: 24.01.2020
Substance number: 0145900000100-023 Replaces Version: 1 / GB	Print date: 12.05.23
There are no data available on the mixture itself.	
12.5. Results of PBT and vPvB assessment General information There are no data available on the mixture itself.	
12.7. Other adverse effects General information There are no data available on the mixture itself.	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Disposal recommendations for the product Do not allow to enter drains or water courses. Dispose of waste according to applicable legislation.	

Dispose of as hazardous waste.

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste. Completely emptied packagings can be given for recycling.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Subsidiary risk		-	-
Label			
14.4. Packing group	-	-	-
Transport category	0		
14.5. Environmental hazards		no	
	-		-

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7 Maritime transport in bulk according to IMO instruments

ade name: Marabu Aqua Per			Marab
	Ve	ersion: 2/GB	Date revised: 24.01.202
bstance number: 01459000	00100-023 Re	eplaces Version: 1 / GB	Print date: 12.05.2
no			
ECTION 15: Regulate			
5.1. Safety, health and e r mixture	nvironmental i	^r egulations/legislation	specific for the substance
VOC			
VOC (EU)	5	%	
Other information	0	70	
	ontain substances	of very high concern (SVHC)	
5.2. Chemical safety as		, , , , , , , , , , , , , , , , , , ,	
		essment has not been carried	d out.
ECTION 16: Other int	formation		
Hazard statements list			
H301	Toxic if swal	lowed	
H302	Harmful if sv		
H310	Fatal in cont	act with skin.	
H314	Causes seve	ere skin burns and eye dama	ae.
H317		an allergic skin reaction.	5
H318		ous eye damage.	
H319		ous eye irritation.	
H330	Fatal if inhal	5	
H373			olonged or repeated exposure.
H400	Very toxic to		olonged of repeated exposure.
H410		aquatic life with long lasting	effects
CLP categories listed i	-	aquatio nie with long lasting	
Acute Tox. 2		y, Category 2	
Acute Tox. 3		y, Category 3	
Acute Tox. 4		y, Category 4	
Aquatic Acute 1		o the aquatic environment, a	cute Category 1
Aquatic Chronic 1		o the aquatic environment, cl	
Eye Dam. 1		damage, Category 1	
Eye Irrit. 2		, Category 2	
Skin Corr. 1C	Skin corrosi	on, Category 1C	
Skin Sens. 1		ation, Category 1	
Skin Sens. 1A		ation, Category 1A	
STOT RE 2		et organ toxicity - repeated e	exposure, Category 2
Supplemental information		<u></u> ,	
		ious version of the safety dat	ta sheet are marked with: ***
This information is base	d on our present s	tate of knowledge. However,	it should not constitute a
guarantee for any spec	ific product properti	ies and shall not establish a l	legally valid relationship.
The information in this		is based on the present state	
legislation.	haalthfit	and the second	
		environmental aspects of the	
		erformance or suitability for p	
	ining written handli	ing instructions.	n Section 1 without first referring
to the supplier and obta	os of use of the pro	duct are outside the supplier	's control, the user is responsible
	is of use of the pro	additate catolide the cappile.	
As the specific condition		ant legislation are complied v	with.
As the specific condition for ensuring that the red	quirements of releva	ant legislation are complied v	with. the user's own assessment of

Page 60 of 71

Safety d	r #24547 - MARB AQ	UA PEN GRAP	PIX					Page
	ata sheet in accorda	nce with regu	Ilation (EC)	No 1907/20	906			
Trade na	me: Marabu Aqua P	en Mega Mash	12pcs MN/	A 0.31				
induc nui		en mega maon		2/GB		Da	te revised:	Mara 24.01.202
Substand	ce number: 0145900	000100 021		s Version:	1 / GB	Du		ate: 12.05.2
Substant	ce number. 0143900	000100-031	Керіасс	3 VCISION.	17 00		1 1111 4	ato: 12.00.2
<u>SECTI</u>	ON 1: Identific	<u>ation of th</u>	<u>ie subst</u> a	<u>ance/mi</u>	<u>xture and</u>	d of the		
<u>compa</u>	<u>iny/undertakin</u>	g						
1.1. Pro	oduct identifier							
	Marabu Aqua Pen Me	ega Mash 12pc	s MNA 031					
12 Re	levant identified	uses of the	substand	e or mix	ture and u	ses advis	ed agair	nst
			Substant				ocu ugun	131
	the substance/p Paint	reparation						
	entified Uses							
	SU21	Consumer us	coc: Privato	boucobolde	(_ goporal r	ublic – con	sumore)	
	PC9a	Coatings and				ublic = cons	sumers)	
13 Do	tails of the supp	-	•					
			alety uata	Sheet				
	dress/Manufacture Marabu GmbH & Co.							
	Asperger Strasse 4	KG						
	71732 Tamm							
	Germany							
	Telephone no.	+49-7141/69	-					
	Information provided by / telephone	Department	product safe	ŧty				
	E-mail address of	PRSI@mara	bu.com					
	person responsible		20100111					
1	for this SDS							
	nergency telepho	ne number						
1.4. En								
	(+49) (0)621-60-4333	3						
	(+49) (0)621-60-4333		()					
			<u>tion</u>					
SECTI	(+49) (0)621-60-4333	identifica		re				
<u>SECTI(</u> 2.1. Cla	(+49) (0)621-60-4333 ON 2: Hazards assification of th	identifica e substance	e or mixtu					
SECTI 2.1. Cla Cla	(+49) (0)621-60-4333 ON 2: Hazards	identifica e substance ation (EC) No	e or mixtu o. 1272/20					
SECTI 2.1. Cla Cla	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul	identifica e substance ation (EC) No	e or mixtu o. 1272/20 1272/2008)					
SECTI 2.1. Cla Cla	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul	identifica e substance ation (EC) No	e or mixtu o. 1272/20 1272/2008)	08)				
<u>SECTI(</u> 2.1. Cla Cla 2.2. La	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements	identifica e substance ation (EC) No Aquatic Chro	e or mixtu o. 1272/200 1272/2008) onic 3	08) H412	008			
SECTIO 2.1. Cla Cla 2.2. La La	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regule Classification (Regule bel elements belling according	identifica e substance ation (EC) No Aquatic Chro	e or mixtu o. 1272/200 1272/2008) onic 3	08) H412	008			
<u>SECTIO</u> 2.1. Cla Cla 2.2. La La Ha:	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements	identifica e substance ation (EC) No. Aquatic Chro	e or mixtu o. 1272/200 1272/2008) onic 3 ion (EC) N	08) H412 No 1272/2				
<u>SECTIC</u> 2.1. Cla Cla 2.2. La La Ha:	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412	identifica e substance ation (EC) No. Aquatic Chro g to regulati Harmful to ad	e or mixtu o. 1272/200 1272/2008) onic 3 ion (EC) N	08) H412 No 1272/2				
SECTIO 2.1. Cla Cla 2.2. La La Ha: Pre	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412 ecautionary statem	identifica e substance ation (EC) No. Aquatic Chro g to regulati Harmful to ac nents	e or mixtu o. 1272/200 1272/2008) onic 3 ion (EC) N quatic life wi	08) H412 Io 1272/2				
SECTIO 2.1. Cla Cla 2.2. La La Ha: Pre	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412 ecautionary statem P273	identifica e substance ation (EC) No. Aquatic Chro g to regulati Harmful to ac nents Avoid release	e or mixtu o. 1272/200 1272/2008) onic 3 ion (EC) N quatic life wi e to the env	08) H412 Io 1272/2 ith long lasti ironment.	ng effects.			
SECTIO 2.1. Cla Cla 2.2. La La Ha: Pre	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412 ecautionary statem P273 P501.9	identifica e substance ation (EC) No. Aquatic Chro g to regulati Harmful to ac nents Avoid release Dispose of co	e or mixtu o. 1272/2008) 1272/2008) onic 3 ion (EC) N quatic life wi e to the env ontents/cont	08) H412 Io 1272/2 ith long lasti ironment. tainer as pro	ng effects. bblematic wa			
SECTIO 2.1. Cla Cla 2.2. La La Ha: Pre	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412 ecautionary statem P273	identifica e substance ation (EC) No. Aquatic Chro g to regulati Harmful to ac nents Avoid release Dispose of co reaction mas	e or mixtu o. 1272/200 1272/2008) onic 3 ion (EC) N quatic life wi e to the env ontents/cont ss of 5-chlore	08) H412 Io 1272/2 ith long lasti ironment. tainer as pro o-2-methyl-2	ng effects. oblematic wa 2H-isothiazol	-3-one and	reaction.	
SECTIO 2.1. Cla Cla 2.2. La La Ha: Pre	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regula Classification (Regula bel elements belling according zard statements H412 ecautionary statem P273 P501.9 EUH208 Contains	identifica e substance ation (EC) No. Aquatic Chro g to regulati Harmful to ad hents Avoid release Dispose of car reaction mas 2-methyl-2H	e or mixtu o. 1272/200 1272/2008) onic 3 ion (EC) N quatic life wi e to the env ontents/cont ss of 5-chlore	08) H412 Io 1272/2 ith long lasti ironment. tainer as pro o-2-methyl-2	ng effects. oblematic wa 2H-isothiazol	-3-one and	reaction.	
SECTIC 2.1. Cla Cla 2.2. La La Ha: Pre Su	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412 ecautionary statem P273 P501.9 EUH208 Contains pplemental inform	identifica e substance ation (EC) No. ~ Aquatic Chro g to regulati Harmful to ac nents Avoid release Dispose of co reaction mas 2-methyl-2H- ation	e or mixtu o. 1272/2008) Dinic 3 ion (EC) N quatic life wi e to the env ontents/cont ss of 5-chlore -isothiazol-3	H412 H412 No 1272/2 ith long lasti ironment. tainer as pro o-2-methyl-2 -one (3:1), I	ng effects. oblematic wa 2H-isothiazol	-3-one and	reaction.	
SECTIO 2.1. Cla Cla 2.2. La La Ha: Pre Su La	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412 ecautionary statem P273 P501.9 EUH208 Contains pplemental inform belling according f	identifica e substance ation (EC) No. 4 Aquatic Chro g to regulati Harmful to ac bents Avoid release Dispose of co reaction mas 2-methyl-2H- ation co regulation	e or mixtu o. 1272/2008) Dinic 3 ion (EC) N quatic life wi e to the env ontents/cont ss of 5-chlore -isothiazol-3	H412 H412 No 1272/2 ith long lasti ironment. tainer as pro o-2-methyl-2 -one (3:1), f 28/2012	ng effects. oblematic wa 2H-isothiazol May produce	-3-one and an allergic		
SECTIO 2.1. Cla Cla 2.2. La La Pre Su La	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412 ecautionary statem P273 P501.9 EUH208 Contains pplemental inform belling according to Contains a biocidal pol	identifica e substance ation (EC) No. ~ Aquatic Chro d to regulati Harmful to ad harmful to ad nents Avoid release Dispose of co reaction mas 2-methyl-2H- ation co regulation	e or mixtu o. 1272/2008) Dinic 3 ion (EC) N quatic life wi e to the env ontents/cont ss of 5-chlore -isothiazol-3	H412 H412 No 1272/2 ith long lasti ironment. tainer as pro o-2-methyl-2 -one (3:1), f 28/2012	ng effects. oblematic wa 2H-isothiazol May produce	-3-one and an allergic		
SECTIO	(+49) (0)621-60-4333 ON 2: Hazards assification of the assification (Regul Classification (Regula bel elements belling according zard statements H412 ecautionary statem P273 P501.9 EUH208 Contains pplemental inform belling according f	identifica e substance ation (EC) No. ~ Aquatic Chro d to regulati Harmful to ad harmful to ad nents Avoid release Dispose of co reaction mas 2-methyl-2H- ation co regulation	e or mixtu o. 1272/2008) Dinic 3 ion (EC) N quatic life wi e to the env ontents/cont ss of 5-chlore -isothiazol-3	H412 H412 No 1272/2 ith long lasti ironment. tainer as pro o-2-methyl-2 -one (3:1), f 28/2012	ng effects. oblematic wa 2H-isothiazol May produce	-3-one and an allergic		

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ade name: Marabu Aqua		cs MNA /ersion:				Marra Date revised: 24.01.202
ubstance number: 01459	_			n: 1/GB		Print date: 12.05.2
ECTION 3: Compo	sition/informa	tion c	on ind	redien	ts ***	
2. Mixtures						
Hazardous ingredie	ents ***					
Ethanediol	407.04.4					
CAS No. EINECS no.	107-21-1 203-473-3					
Registration no.	01-2119456816-2	20				
Concentration	>= 1	-0	<	10	%	
	lation (EC) No. 1272	/2008)		10	70	
× 5	Acute Tox. 4	,	H302			
	STOT RE 2		H373			
3,4,5,6-tetrachloro-2	-(1.4.5.8-tetrabromo	-6-hvdr	oxv-3-c	xoxanthe	n-9-vl)ber	nzoic acid
CAS No.	18472-87-2	•			, .,	
EINECS no.	242-355-6					
Concentration	>= 2,5		<	10	%	
Classification (Regu	lation (EC) No. 1272	/2008)				
	Eye Irrit. 2 Aquatic Chronic 2		H319 H411			
reaction mass of 5-c CAS No.	hloro-2-methyl-2H-i 55965-84-9	sothiaz	ol-3-on	e and 2-m	ethyl-2H-i	isothiazol-3-one (3:1)
Concentration	>= 0,0	01	<	0,0015	%	
	lation (EC) No. 1272			-,		
· -	Acute Tox. 2		H330			
	Aquatic Chronic 1		H410			
	Aquatic Acute 1		H400			
	Skin Sens. 1A		H317			
	Skin Corr. 1C		H314			
	Acute Tox. 2 Acute Tox. 3		H310 H301			
	Eye Dam. 1		H318			
Concentration limits	(Regulation (EC) No	1272/2	2008)			
	Skin Corr. 1C	H314		0.6		
	Eye Irrit. 2	H319		0.06 < 0.6		
	Skin Irrit. 2	H315	>= (0,06 < 0,6		
	Skin Sens. 1	H317	>= (0,0015		
	Aquatic Acute 1	H410		: 100		
	Aquatic Chronic	H410	M =	100		
	Eye Dam. 1	H318	>= (0,6 %		
ECTION 4: First ai	d measures					
1. Description of firs						
After skin contact	alu measures					
	water and soap. Do l	NOT use	e solver	nts or thinn	ers.	
After eye contact						rritation consult an oculist.

		Page 😂 🕂
MSDS for #24547 - MARB AQUA PEN GRA - Safety data sheet in accordance with regr	PIX ulation (EC) No 1907/2006	
Trade name: Marabu Aqua Pen Mega Mash	•	Marabu
	Version: 2/GB	Date revised: 24.01.2020
Substance number: 0145900000100-031	Replaces Version: 1 / GB	Print date: 12.05.23
medical treatment.		
4.2. Most important symptoms and Until now no symptoms known so fa		/ed
4.3. Indication of any immediate m	edical attention and special t	reatment needed
Hints for the physician / treatmer	nt	
Treat symptomatically		
SECTION 5: Firefighting meas	ures	
5.1. Extinguishing media		
Suitable extinguishing media		
Carbon dioxide, Foam, Sand, Water	r	
5.2. Special hazards arising from t	he substance or mixture	
	be released: Carbon monoxide (CO);	Carbon dioxide (CO2); dense
5.3. Advice for firefighters		
Other information		
Collect contaminated fire-fighting wa	ater separately, must not be discharge	d into the drains.
SECTION 6: Accidental release	e measures	
6.1. Personal precautions, protections of the second secon	ive equipment and emergency	/ procedures
6.2. Environmental precautions No particular measures required.		
6.3. Methods and material for cont Clean preferably with a detergent - a		
6.4. Reference to other sections		
Information regarding Safe handling see Section 8. Information regarding	, see Section 7. Information regarding g waste disposal, see Section 13.	personal protective measures,
SECTION 7: Handling and stor	age	
7.1. Precautions for safe handling		
Advice on safe handling		
-	g, eating and drinking shall be prohibit	ted in application area.
Advice on protection against fire		
No special measures required.		
Classification of fires / temperatu	re class / Ignition group / Dust e	explosion class
Temperature class T2		
7.2. Conditions for safe storage, in	cluding any incompatibilities	

Requirements for storage rooms and vessels Store in frostfree conditions.

7.3. Specific end use(s)

Paint

SECTION 8: Exposure controls/personal protection

Item Numbers: 24547-1009

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Safety data sheet in accordance with rade name: Marabu Aqua Pen Mega	•			Date revise	ed: 24.01.2020
Substance number: 0145900000100-0	031	Replaces Version: 1 / 0	ЗB	Prin	t date: 12.05.23
8.1. Control parameters					
Exposure limit values					
Ethanediol					
List	EH40				
Туре	WEL				
Value Skin resorption / sensibilisation	10 i: Sk: 20	mg/m³ 11			
Ethanediol					
List	EU				
Value	52	mg/m³	20	ppm(V)	
Short term exposure limit	104	mg/m ³	40	ppm(V)	
Skin resorption / sensibilisation	: Skin;	Remarks: 2000/39/EG			
Glycerol List	EH40				
Туре	WEL				
Value	10	mg/m ³			
Status: 2011					
Other information					
There are not known any furthe	er contro	ol parameters.			
Derived No/Minimal Effect Le					
Ethanediol		·····,			
Type of value	Deriv	ed No Effect Level (DNEL)		
Reference group	Work		-)		
Duration of exposure	Long				
Route of exposure	inhala				
Mode of action	Local	effects			
Concentration		35		mg/m³	
Type of value	Deriv	ed No Effect Level (DNEL	.)		
Reference group	Work				
Duration of exposure	Long				
Route of exposure	derma				
Mode of action Concentration	Syste	mic effects 106		malka	
Concentration		108		mg/kg	
Type of value	Deriv	ed No Effect Level (DNEL	.)		
Reference group	Cons	umer	,		
Duration of exposure	Long				
Route of exposure	inhala				
Mode of action	Local	effects			
Concentration		7		mg/m³	
Type of value	Deriv	ed No Effect Level (DNEL	.)		
Reference group	Cons	umer			
Duration of exposure	Long				
Route of exposure	derma				
Mode of action	Syste	mic effects		ma/ka	
Concentration		53		mg/kg	
Predicted No Effect Concent	ration ((PNEC)			
Ethanediol					
Type of value	PNEC				
Туре	Fresh	wotor			

	ou Aqua Pen Mega N	•	A 031 : 2 / GB	Date revised: 24.01.2020
bstance number:	0145900000100-03	31 Replace	es Version: 1 / GB	Print date: 12.05.23
Type of valu		PNEC		
Type	JC .	Saltwater		
Concentrati	on	1		mg/l
Type of valu	ar	PNEC		
Type Concentrati	on	Water (intermi 10	tent release)	mg/l
Type of valu	le	PNEC		
Type Concentrati		Sewage treatn 199,5	nent plant (STP)	mg/l
Type of valu	Je	PNEC		
Туре		Freshwater se	diment	
Concentrati	on	37		mg/kg
Type of valu	Je	PNEC		
Type Concentrati	on	Marine sedime 3,7	nt	mg/kg
Type of valu	e	PNEC		
Type Concentrati		Soil 1,53		mg/kg
Provide ade Respiratory Not necess Hand protect	ary.			
There is no individual or For prolong Material thio Breakthroug The breakth	ntensive contact weat one glove material of r combination of che ed or repeated hand ckness > gh time < mough time must be tions and information at must be followed.	r combination c micals. ling nitrile rubbe 0,5 30 greater than the provided by the larly and if there	f materials that will giver gloves with textile umm min e end use time of the glove manufacturer is any sign of damaged and that they are sto	ive unlimited resistance to any undergloves are required. product. on use, storage, maintenance and ge to the glove material. pred and used correctly. hysical/ chemical damage and poor

rade name: Marabu Aqua Pe	n Mega Mash			Marab
		Version: 2/GB		Date revised: 24.01.2020
Substance number: 01459000	000100-031	Replaces Version:	1 / GB	Print date: 12.05.23
9.1. Information on basi	c physical a	and chemical pro	nortios	
Physical state	liqu		pernes	
Colour	colo	oured		
Odour	odo	ourless		
Melting point				
Remarks	not	determined		
Freezing point				
Remarks	not	determined		
Boiling point or initial	boiling poin	it and boiling rang	е	
Value	app		°C	
Pressure Source	Lito	1.013 hPa rature value		
	LILE	Tature value		
Flammability Not applicable				
Upper and lower explo	osive limits			
Lower explosion limit	app		%(V)	
Upper explosion limit Source	app Lite	or. 53 rature value	%(V)	
Flash point	Elle			
Remarks	Not	applicable		
Ignition temperature		applicable		
Value	арр	or. 410	°C	
Source		rature value	U	
Viscosity				
Remarks				
Remarks	not	determined		
Vapour pressure				
Value	арр	or. 23 20 °C	hPa	
Temperature Method	Vali	ue taken from the liter	ature	
Density and/or relative				
Remarks	-	determined		
Relative vapour densi				
Remarks		determined		
9.2. Other information				
Odour threshold	Nie	dete en la Vela la		
Remarks		data available		
Evaporation rate (ethe	-	datarminad		
Remarks	not	determined		
Solubility in water Remarks	~:-	cible		
Other information	mis	CIDIE		
None known				
SECTION 10: Stability	and ross	+i\/i+\/		

MSDS for #24547 - MARB AQUA PI	EN GRAF	PIX	007/2006	Page
Safety data sheet in accordance v	with regu	ation (EC) NO 1)07/2000	
rade name: Marabu Aqua Pen Me	ega Mash	12pcs MNA 031		
		Version: 2/0	θB	Date revised: 24.01.2020
Substance number: 01459000001	00-031	Replaces Vers	sion: 1/GB	Print date: 12.05.23
10.2. Chemical stability				
No hazardous reactions kno				
10.3. Possibility of hazardou No hazardous reactions kno		lions		
10.4. Conditions to avoid No hazardous reactions kno	own.			
10.5. Incompatible materials None	5			
	tion	duata		
10.6. Hazardous decompositi				
No hazardous decomposition	on produc	as known.		
SECTION 11: Toxicologi	cal info	ormation		
11.1 Information on hazard	classes	as defined in	Regulation (EC	5) NO 1272/2008
Acute oral toxicity				
Remarks		on available data	, the classification c	criteria are not met.
Acute oral toxicity (Comp	onents)			
Ethanediol				
Species	rat			
LD50		7712	mg/k	g
Acute dermal toxicity				
Remarks			, the classification o	criteria are not met.
Acute dermal toxicity (Co	mponen	ts)		
Ethanediol				
Species LD50	rabbit	0520	~~~~ //	
	>	9530	mg/k	.g
Acute inhalational toxicity			the election of	
Remarks	Based	on available data	, the classification c	criteria are not met.
Skin corrosion/irritation				
	Dec - 1	an aveilet - t-t		vitaria ara naturat
Remarks		on available data	, the classification c	riteria are not met.
Remarks Serious eye damage/irrita	tion			
Remarks Serious eye damage/irrita Remarks	tion		, the classification o	
Remarks Serious eye damage/irrita Remarks Sensitization	tion Based	on available data	, the classification c	criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks	tion Based	on available data		criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity	tion Based Based	on available data on available data	, the classification c	criteria are not met. criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity Remarks	tion Based Based	on available data on available data	, the classification c	criteria are not met. criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity Remarks Reproductive toxicity	tion Based Based Based	on available data on available data on available data	, the classification o , the classification o , the classification o	criteria are not met. criteria are not met. criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity Remarks Reproductive toxicity Remarks	tion Based Based Based	on available data on available data on available data	, the classification c	criteria are not met. criteria are not met. criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity Remarks Reproductive toxicity Remarks Carcinogenicity	tion Based Based Based Based	on available data on available data on available data on available data	, the classification o , the classification o , the classification o , the classification o	criteria are not met. criteria are not met. criteria are not met. criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity Remarks Reproductive toxicity Remarks Carcinogenicity Remarks	tion Based Based Based Based Based	on available data on available data on available data on available data on available data	, the classification o , the classification o , the classification o	criteria are not met. criteria are not met. criteria are not met. criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity Remarks Reproductive toxicity Remarks Carcinogenicity	tion Based Based Based Based Based	on available data on available data on available data on available data on available data	, the classification o , the classification o , the classification o , the classification o	criteria are not met. criteria are not met. criteria are not met. criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity Remarks Reproductive toxicity Remarks Carcinogenicity Remarks	tion Based Based Based Based Based kicity (S	on available data on available data on available data on available data on available data FOT)	, the classification o , the classification o , the classification o , the classification o	criteria are not met. criteria are not met. criteria are not met. criteria are not met. criteria are not met.
Remarks Serious eye damage/irrita Remarks Sensitization Remarks Mutagenicity Remarks Reproductive toxicity Remarks Carcinogenicity Remarks Specific Target Organ Tox Single exposure	tion Based Based Based Based kicity (S Based	on available data on available data on available data on available data on available data FOT) on available data	, the classification o , the classification o , the classification o , the classification o , the classification o	criteria are not met. criteria are not met. criteria are not met. criteria are not met. criteria are not met.

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GRAPIX		Page 🏞 🗠
regulation (EC) No 1907/2	906	
Mash 12ncs MNA 031		
•	Date re	Marabu evised: 24.01.2020
		Print date: 12.05.23
31 Replaces version.	I/GB	Finit date. 12.05.25
th effects such as mucous m liver and central nervous sy	nembrane and respiratory sys stem. Symptoms and signs ir	stem irritation Include headache,
	Mash 12pcs MNA 031 Version: 2 / GB 031 Replaces Version: lassification criteria are not n nts vapours concentration in lth effects such as mucous n liver and central nervous sy	Mash 12pcs MNA 031 Version: 2 / GB Date re

reversible damage. Ingestion may cause nausea, diarrhoea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and

long-term exposure by oral, inhalation and dermal routes of exposure and eye contact. **Other information**

There are no data available on the mixture itself.

The mixture has been assessed following the additivity method of the CLP Regulation (EC) No 1272/2008 and classified for toxicological hazards accordingly.

SECTION 12: Ecological information

12.1. Toxicity

General information

There are no data available on the mixture itself.Do not allow to enter drains or water courses.The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Fish toxicity (Components)

Ethanediol				
Species	Fathea		(Pimephales prome	las)
LC50		8050		mg/l
Duration of exposure		96	h	
reaction mass of 5-chloro-2-	-methyl-	2H-isothia	zol-3-one and 2-m	ethyl-2H-isothiazol-3-one (3:1)
Species	rainbo	w trout (On	corhynchus mykiss)	
LC50		0,188		mg/l
Duration of exposure		96	h	
Daphnia toxicity (Compone	ents)			
Ethanediol				
Species	Daphn	ia magna		
	>	10000		mg/l
Duration of exposure		24	h	
reaction mass of 5-chloro-2-	-methyl-	2H-isothia	zol-3-one and 2-m	ethyl-2H-isothiazol-3-one (3:1)
Species	Daphn	ia magna		
EC50		0,126		mg/l
Duration of exposure		48	h	
Algae toxicity (Component	is)			
				ethyl-2H-isothiazol-3-one (3:1)
Species	Selena	astrum capi	ricornutum	
EC50		0,027		mg/l
Duration of exposure		72	h	
12.2. Persistence and degrad	dability	1		
General information				
There are no data available	on the m	nixture itsel	f.	
12.3. Bioaccumulative poten	tial			

MSDS for #24547 - MARB AQUA PEN GRAP	X ation (EC) No 1907/2006	Page
Trade name: Marabu Aqua Pen Mega Mash		Marabu Date revised: 24.01.2020
Substance number: 0145900000100-031	Replaces Version: 1 / GB	Print date: 12.05.23
General information There are no data available on the mi	xture itself.	
12.4. Mobility in soil		
General information There are no data available on the mi	xture itself.	
12.5. Results of PBT and vPvB asse General information There are no data available on the mi		
12.7. Other adverse effects		
General information		
There are no data available on the mi	xture itself.	
SECTION 13: Disposal consider	rations	
13.1. Waste treatment methods		
Disposal recommendations for the Do not allow to enter drains or water of Dispose of waste according to applicat Dispose of as hazardous waste.	courses.	

Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste. Completely emptied packagings can be given for recycling.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Subsidiary risk		-	-
Label			
14.4. Packing group	-	-	-
Transport category	0		
14.5. Environmental hazards		no	
	-		-

Information for all modes of transport 14.6. Special precautions for user

15.1. Safety, health and environm or mixture VOC VOC (EU) Other information The product does not contain subs	Version Replace es: ers that are u he product kr ording to IM rmation	: 2 / GB es Version: pright and s now what to D instrume	ecure. do in the event nts		
Substance number: 014590000100-031 Transport within the user's premise Always transport in closed contain Ensure that persons transporting to Other information 14.7 Maritime transport in bulk acce no SECTION 15: Regulatory info 15.1. Safety, health and environme or mixture VOC VOC (EU) Other information The product does not contain subs	Version Replace ers that are u he product kr ording to IM <u>rmation</u> nental regu	: 2 / GB es Version: pright and s now what to D instrume	ecure. do in the event nts	Print date: 12.05.23	
Transport within the user's premise Always transport in closed contain Ensure that persons transporting t Other information 14.7 Maritime transport in bulk accur no SECTION 15: Regulatory info 15.1. Safety, health and environm or mixture VOC VOC (EU) Other information The product does not contain subs	Replace es: hers that are u he product kr ording to IM mental regu	es Version: pright and s how what to D instrume	ecure. do in the event nts	Print date: 12.05.23	
Transport within the user's premise Always transport in closed contain Ensure that persons transporting t Other information 14.7 Maritime transport in bulk accur no SECTION 15: Regulatory info 15.1. Safety, health and environm or mixture VOC VOC (EU) Other information The product does not contain subs	es: hers that are u he product kr ording to IM ording to IM nental regu	pright and s now what to O instrume	ecure. do in the event nts	t of an accident or spillage.	
Always transport in closed contain Ensure that persons transporting t Other information 14.7 Maritime transport in bulk accur no SECTION 15: Regulatory info 5.1. Safety, health and environm or mixture VOC VOC (EU) Other information The product does not contain subs	ers that are u he product kr ording to IM <u>rmation</u> nental regu	ow what to O instrume lations/le	do in the event		
14.7 Maritime transport in bulk acc no SECTION 15: Regulatory info 15.1. Safety, health and environm or mixture VOC VOC (EU) Other information	rmation nental regu	lations/le		pecific for the substance	
15.1. Safety, health and environm or mixture VOC VOC (EU) Other information The product does not contain subs	nental regu		gislation sp	pecific for the substance	
or mixture VOC VOC (EU) Other information The product does not contain subs	-		gislation sp	pecific for the substance	
VOC (EU) Other information The product does not contain subs	5				
Other information The product does not contain subs	5				
Other information The product does not contain subs		%			
			(0)		
15.2. Chemical safety assessmen	stances of ver	y high conc	ern (SVHC).		
For this preparation a chemical sa	i t fety assessm	ent has not	been carried o	ut.	
ECTION 16: Other information					
Hazard statements listed in Cha	-				
	ic if swallowed				
	Harmful if swallowed.				
	Fatal in contact with skin.				
	Causes severe skin burns and eye damage.				
	May cause an allergic skin reaction.				
	ses serious e				
	ses serious e	ye irritation.			
	al if inhaled.	an to organ	through prolo	pread or reported experience	
	/ toxic to aqua		s through proto	nged or repeated exposure.	
			long locting off	io oto	
	Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.				
	•	le with long	lasting ellects.		
CLP categories listed in Chapte					
	te toxicity, Ca				
	te toxicity, Ca te toxicity, Ca				
			ironment, acut	e Category 1	
				nic, Category 1	
				nic, Category 2	
	ous eye dama			,	
	irritation, Cat				
	corrosion, C				
	sensitization		A		
STOT RE 2 Spec	cific target or	gan toxicity	- repeated expo	osure, Category 2	
Supplemental information					
Relevant changes compared with	the previous	version of th	e safetv data s	sheet are marked with: ***	
This information is based on our p guarantee for any specific product The information in this Safety Data	resent state of properties ar	of knowledge nd shall not	e. However, it s establish a lega	should not constitute a ally valid relationship.	
legislation. It provides guidance on health, sat					
construed as any guarantee of tec The product should not be used fo					
	Pan	e 10(11)			

MSDS for #24547 - MARB AQUA PEN GRAPIX Safety data sheet in accordance with regulation (EC) No 1907/2006	Page 71 of 7
Safety data sheet in accordance with regulation (EC) No 1907/2006	
Trade name: Marabu Aqua Pen Mega Mash 12pcs MNA 031	
Version: 2 / GB Dat	te revised: 24.01.2020
Substance number: 0145900000100-031 Replaces Version: 1 / GB	Print date: 12.05.23
to the supplier and obtaining written handling instructions.	
As the specific conditions of use of the product are outside the supplier's control, the	user is responsible
for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's ow	n accossment of
workplace risks, as required by other health and safety legislation.	assessment of