SAFETY DATA SHEET

Printing date 1.30.2021 Revision: 1

- Identification of the chemical and supplier
- Product identifier
- Trade name: ArtPOP! Fineliner Pens
- Relevant identified uses of the substance or mixture and uses advised against.

Currently no such applications are identified

- Application of the substance / the mixture water based marking ink.
- Details of the supplies of the safety data sheet
- Manufacturer/Supplier

Makers of America, LLC

Drooklyn, NY 11232, U.S.A.

Further information obtainable from:

Phone: 808-224-6256

Email: info@artpop.com

For transportation emerge cies only call: 1-847-681-6831

For health emergencies call the Poison Control Center: 1-800-222-1222



H317 May cause an allergic skin reaction

Vater-based color ink				Revision Date: 1.30.20
H37	May cause damage	to organs through p	prolonged or rep	eated exposure
Precautionary stateme	nts			
◆ Prevention				
P26	io Do not breathe dus	st/fume/gas/mist/vap	oours/spray.	
P27	2 Contaminated work	k clothing should not	be allowed out	of the workplace.
P28	10 Wear protective glo	oves/protective cloth	ing/eye protecti	ion/face protection.
◆ Response				
P31	4 Get medical advice	/attention if you feel	unwell	
P302+P3	2 IF ON SKIN: Wash v	with plenty of water.		
P333+P31	3 If skin irritation or r	ash occurs: Get med	ical advice/atter	otion.
P362+P36	4 Take off contamina	ted clothing and was	sh it before reus	Θ.
◆ Storage				
Storag	Not applicable			
◆ Disposal				
1 4 4 4	Dispose of conten	nts/container in acc	ordance with	local/regional/nationa
P50	international regulat	tions.		
 Physical and chemic 	No information avai	lable		
♦ Health hazards	-			
	Inhalation of the produ	ict may produce adve	erse health effec	ts or irritation of the
nhaled	manufacture of the property of	flowing discomfort.		
ngestion	individual.	on of the product ma	Extra participante	
Skin Contact		use an allergic skin r	eaction followin	g direct contact with
	the skin.			
skin Contact	This product may caus	e temporary discomi	fort following di	rect contact with the
	This product may caus eye.	e temporary discom	fort following di	rect contact with the
Eye	eye.	e temporary discom	fort following di	rect contact with the
Eye	eye.		fort following di	rect contact with the
Eye Environmental hazard	eye. s Please refer to 12th	chapter of SDS.	fort following di	rect contact with the
Eye Environmental hazard	eye.	chapter of SDS.	fort following di	rect contact with the
Eye Environmental hazards Composition/in	eye. s Please refer to 12th	chapter of SDS.	fort following di	Concentration (weight percent, %)
Environmental hazard	eye. Please refer to 12th formation on ing	chapter of SDS. redients		Concentration

Glycerol	56-81-5	200-289-5	Commercial secrets
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secret
	20172-55-4	247-500-7	Commercial secret
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	H	Commercial secret
DYE	8004-92-0	305-879-5	Commercial secret
Water	7732-18-5	231-791-2	Commercial secret
Acid Ye	llow 23		
Ethylene glycol	107-21-1	203-473-3	Commercial secret
Glycerol	56-81-5	200-289-5	Commercial secret
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secret
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	2:	Commercial secret
DYE	1934-21-0	217-699-5	Commercial secret
Water	7732-18-5	231-791-2	Commercial secret
Acid R	ted 18		•
Ethylene glycol	107-21-1	203-473-3	Commercial secret
Glycerol	56-81-5	200-289-5	Commercial secret
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secret
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	78	Commercial secret
DYE	2611-82-7	220-036-2	Commercial secret
Water	7732-18-5	231-791-2	Commercial secret
Acid R	ted 52		
Ethylene glycol	107-21-1	203-473-3	Commercial secret
Glycerol	56-81-5	200-289-5	Commercial secret
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secret
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3-(1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	-8	Commercial secret
DYE	3520-42-1	222-529-8	Commercial secret
Water	7732-18-5	231-791-2	Commercial secret

Water-based color ink	Revision Date: 1.30.202			
Acid Red 87				
Ethylene glycol	107-21-1	203-473-3	Commercial secrets	
Glycerol	56-81-5	200-289-5	Commercial secrets	
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secrets	
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	-	Commercial secrets	
DYE	17372-87-1	241-409-6	Commercial secrets	

nter-based color ink		E-000000000000000000000000000000000000	Revision Date: 1.30.20
Water	7732-18-5	231-791-2	Commercial secrets
Acid	Blue 9		
Ethylene glycol	107-21-1	203-473-3	Commercial secret
Glycerol	56-81-5	200-289-5	Commercial secret
F5-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secret
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	Ģ.	Commercial secret
DVE	2650-18-2	220-168-0	Commercial secret
Water	7732-18-5	231-791-2	Commercial secret
Acid B	lue 104		
Ethylene glycol	107-21-1	203-473-3	Commercial secret
Glycerol	56-81-5	200-289-5	Commercial secret
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secret
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	a	Commercial secret
DYE	6505-30-2	229-390-2	Commercial secret
Water	7732-18-5	231-791-2	Commercial secret
Direct Blad	ck mixture		1
Ethylene glycol	107-21-1	203-473-3	Commercial secret
Glycerol	56-81-5	200-289-5	Commercial secret
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secret
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl oxy)disiloxanyl)propyl ether)	134180-76-0	H	Commercial secret
Black SP		305-879-5	Commercial secret
Water	7732-18-5	231-791-2	Commercial secret
Acid Vi	iolet 17		
Ethylene glycol	107-21-1	203-473-3	Commercial secret
Glycerol	56-81-5	200-289-5	Commercial secret
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secret

later-based color ink			Revision Date: 1.30.202
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	760	Commercial secrets
DVE	4129-84-4	223-942-6	Commercial secrets
Water	7732-18-5	231-791-2	Commercial secrets
Acid I	Red 92		
Ethylene glycol	107-21-1	203-473-3	Commercial secrets
Glycerol	56-81-5	200-289-5	Commercial secrets
FS-14D (Thiazoline compound)	26172-55-4	247-500-7	Commercial secrets
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	15	Commercial secrets
DYE	18472-87-2	242-355-6	Commercial secrets
Water	7732-18-5	231-791-2	Commercial secrets

First aid measures

Description of first aid measures

2 Symptoms may be delayed.

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.		
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.		
Skin contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.		
Ingestion	person. Call a physician or Poison Control Center immediately. Move victim into fresh air. If breathing is difficult, give oxygen. Do not use		
Inhalation			
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.		
Most important sympton	ms and effects, both acute and delayed		
1 Please see section 11.			
Indication of any immed	iate medical attention and special treatment needed		
1 Treat symptomatically.			

	r-based color ink	Revision Date: 1.30.202
	refighting measures	
-	nguishing media	
	uitable extinguishing media	Use extinguish. g media suita' ie for surrounding area.
	Unsuitable extinguishing media	There is no restriction on t' a type of extinguisher which may he used.
Spec	cific hazards arising f	rom the substance o <u>nixture</u>
1	Not combustible, not	considered a significant fire risk, however containers may burn.
2 Adv	Development of hazar ice for firefighters	dous combustion gases or vapor possible in the event of fire.
1.	As in any fire, wear set protective gear.	f-contained breathing apparatus. (MSHA/NIOSH approved or equilialent) and full
2	Fight fire from a safe of	distance, with adequate cover.
3	Suppress (knock dow	n) gases/vapor/mists with water spray.
1	Ensure adequate venti	otective equipment and emergency procedures ilation. Remove all sources of ignition. Take precautionary measures ag institution.
**	discharges.	
2		safe areas. Keep people away from and upwind of spill/leak.
3		ve equipment. Avoid breathing vapours, mist or gas.
NUMBER OF STREET	ronmental precautio	The second secon
1	Prevent further leakag	e or spillage if safe to do so.
2		vironment must be avoided.
Met		or <mark>containment and cl</mark> eaning up
1	Absorb spilled materia by bunding.	l in dry sand or inert absorbent. In case of large amount of spillage, contail a spill
2	Adhered or collected r regulations.	naterial should be promptly disposed of, in accordance with appropriate law a and
3	Remove all sources of	ignition. Use spark-proof tools and explosion-proof equipment.
_	Handling and stor	
1	Handling is performed	d in a well ventilated place.
2	wear suitable protecti	ive equipment.
3	Avoid contact with ski	

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Water-based color ink

Precautions for storage

Keep containers tightly closed.

Keep containers in a dry, cool and well-ventilated place.

Keep away from heat/sparks/open flames/hot surfaces.

Store away from incompatible materials and foodstuff containers.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8 Exposure controls/personal protection

| Control parameters

Occupational Exposure limit values

and the second second second		Limit value	Limit value - Eight hours		- Short term
Component	Country/Region	ppm	mg/m³	ppm	mg/m³
	South Korea	123	9	40	100
	New Zealand	19401	-	50	127
Ethylene glycol	Ireland	20	52	40	104
107-21-1	Germany (AGS)	10	26	20	52
	Denmark	10	26	20	52
	Australia	20	52	40	104
Glycerol	USA - OSHA	133	15	(%	<u>.</u>
56-81-5	South Korea	100	10	626	8
-	treland	(2 4)	10	65	38
	Germany (DFG)	(55%)	50	873	100
	Belgium	100	10	626	8
-	Australia	(E)	10	355	8

Biological limit values

Biological limit values No information available

- Monitoring methods
 - EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
- 2 GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air(Series standard)

| Engineering controls

- Ensure adequate ventilation, especially in confined areas.
- Ensure that eyewash stations and safety showers are close to the workstation location.

Wate	er-based color ink	Revision Date: 1.30.2021	
3	Use explosion-proof electrical/ventilating/lighting/equipment		
4	Set up emergency exit and necessary risk-elimination area.		
5	Handle in accordance with good industrial hygiene and safety practice.		
Per	sonal protection equi	pment	
	General requirement Eye protection	Tightly fitting safety goggles (approved by EN 165(EU) or NIOSH (US).	
	Hand protection	Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.	
1	Respiratory protection	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.	
Ski	n and body protection	Wear fire/flame resistant/retardant clothing and antistatic boots.	

Physical and chemical properties

Physical and chemical properties

Appearance	Colored liquids
Odor	No special odor
Odor threshold	No information available
pH	No information available
Melting point/freezing point(°C)	< 20
Initial boiling point and boiling range(°C)	>35
Flash point(Closed cup,°C)	The flash point above 93 ℃
Evaporation rate	No information available
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	Upper limit: No information available: Lower limit: No information available
Vapor pressure	No information available
Relative vapour density(Air = 1)	×1
Relative elensity(Water-1)	No information available

Water-based color ink	Revision Date: 1.30.20			
Solubility(mg/L)	Soluble in water			
n-octanol/water partition coefficient	No information available			
Auto-ignition temperature(°C)	No information available			
Decomposition temperature(°C)	No information available			
Kinematic viscosity	No information available			
Particle characteristics	Not applicable			
Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.			
Chemical stability	Stable under proper operation and storage conditions.			
Possibility of hazardous reactions	In contact with oxidants causes severe reactions, and may cause a fire or explosion. In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen.			
	Incompatible materials, heat, flame and spark			
Conditions to avoid	incompanie materials, fleat, name and spark.			
Incompatible materials	Oxidants, alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide.			

| Acute toxicity

Component	Cas No.	LD _{so} (oral)	LD ₅₀ (dermal)	LC ₅₀ (inhalation,4h)
DYE	1934-21-0	12750mg/kg(Mouse)	No information available	No information available
Glycerol	56-81-5	12600mg/kg(Rat)	> 10000mg/kg(Rabbit)	No information available
DYE	3520-42-1	10300mg/kg(Mouse)	No information available	No information available
DYE	8004-92-0	2000mg/kg(Rat)	No information available	No information available
DYE	2611-82-7	> 8000mg/kg(Rat)	No information available	No information available
FS-14D (Thiazoline compound)	26172-55-4	53mg/kg(Rat)	No information available	No information available

Water-based color ink

Ethylene glycol	107-21-1	4700mg/kg(Rat)	10600mg/kg(Rabbit)	No information available	
DYE	18472-87-2	8400mg/kg(Rat)	No information available	No information available	
DYE	17372-87-1	2344mg/kg(Mouse)	No information available	No information available	

Carcinogenicity

ID	Cas No.	s No. Component		NTP
1	107-21-1	Ethylene glycol	Not Listed	Not Listed
2	56-81-5	56-81-5 Glycerol		Not Listed
3	26172-55-4	FS-14D (Thiazoline compound)	Not Listed	Not Listed
4	WET KL245 (Oxirane, methyl, polymer wi 134180-76-0 oxirane, mono(3 - (1,3,3,3-tetra methyl-1 ((trimethylsilyl)oxy)disiloxanyl)propyl)ethe		Not Listed	Not Listed
5	8004-92-0	DYE	Not Listed	Not Listed
6	7732-18-5	Water	Not Listed	Not Listed
7	1934-21-0	DYE	Not Listed	Not Listed
8	2611-82-7	DYE	Not Listed	Not Listed
9	3520-42-1	DYE	Not Listed	Not Listed
10	17372-87-1	DYE	Not Listed	Not Listed
11	2650-18-2	DYE	Not Listed	Not Listed
12	6505-30-2	DYE	Not Listed	Not Listed
13	-	- Black SP		Not Listed
14	4129-84-4	4129-84-4 DYE		Not Listed
15	18472-87-2 DYE		Not Listed	Not Listed

Others

Water-based color ink

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ater-based color ink	Revision Date: 1.30.2021
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	May cause an allergic skin reaction
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met

12 Ecological information

Component	Cas No.	Bioaccumulative potential	comments
Ethylene glycol	107-21-1	Low	BCF=200
DYE	17372-87-1	High	Log K _{OW} =4.8032
DYE	1934-21-0	Low	BCF=3
DYE	2611-82-7	Low	Log Kow=1.6301
FS-14D (Thiazoline compound)	26172-55-4	Low	Log Kow=0.0444
DYE	2650-18-2	Low	Log K _{OW} =2.0459
DYE	4129-84-4	Medium	Log Kow=4.1531
Water	7732-18-5	Low	Log Kow=-1,38

Water-based color ink

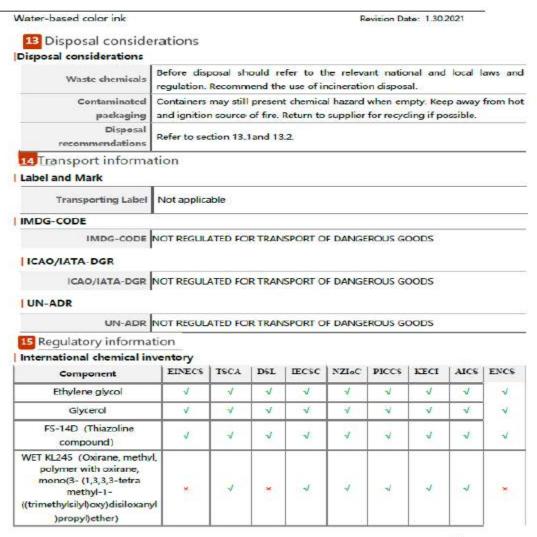
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| Mobility in soil

Component	Cas Na.	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
Ethylene glycol	107-21-1	High	1
DYE	17372-87-1	Low	18860
DYE	1934-21-0	Low	79.38
DYE	2611-82-7	Low	1572000
FS-14D (Thiazoline compound)	26172-55-4	Low	45.15
DYE	2650-18-2	Low	1000000000
DYE	4129-84-4	Low	1000000000
Water	7732-18-5	Low	14.3

Results of PBT and vPvB assessment

Component	Cas No.	Results of PBT and vPvB assessment (according to (EC) No 1907/2006)			
Ethylene glycol	107-21-1	not PBT/vPvB			
Glycerol	56-81-5	not PBT/vPvB			
FS-14D (Thiazoline compound)	26172-55-4	not PBT/vPvB			
WET KL245 (Oxirane, methyl, polymer with oxirane, mono(3- (1,3,3,3-tetra methyl-1- ((trimethylsilyl)oxy)disiloxanyl)propyl)ether)	134180-76-0	not PBT/vPvB			
DYE	8004-92-0	not PBT/vPvB			
Water	7732-18-5	not PBT/vPvB			
DYE	1934-21-0	not PBT/vPvB			
DYE	2611-82-7	not PBT/vPvB			
DYE	3520-42-1	not PBT/vPvB			
DYE	17372-87-1	not PBT/vPvB			
DYE	2650-18-2	not PBT/vPvB			
DYE	6505-30-2	not PBT/vPvB			
DYE	4129-84-4	not PBT/vPvB			
DYE	18472-87-2	not PBT/vPvB			



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DYE	×	√	√	-√	-√	√	√	√	√ ا
Water	√	√	√	√	√	√	√	√	×
DYE	٧	√	√	√	√	√	√	√.	-√
DYE	√	-√	√	4	-√	√	√	√	-√
DYE	√	√	✓	-√	√	√	√	√	√
DYE	√	√	✓	4	√	√	✓	√	✓
DYE	√	√	√	√	√	√	√	√	- √
DYE	√	√	×	√	×	×	√	×	×
Black SP	×	x	×	×	×	×	×	×	×
DYE	√	√	√	-√	√	√	√	√	\ √
DYE	- √	√	√	-√	√	√	√	√	√ ا

[EINECS] European Inventory of Existing Commercial Chemical Substances

[TSCA] United States Toxic Substances Control Act Inventory

[DSL] Canadian Domestic Substances List

[IECSC] China Inventory of Existing Chemical Substances

[NZIoC] New Zealand Inventory of Chemicals

[PICCS] Philippines Inventory of Chemicals and Chemical Substances

[KECI] Existing and Evaluated Chemical Substances
[AICS] Australia Inventory of Chemical Substances

[ENCS] Existing And New Chemical

Substances Note

"V" Indicates that the substance included in the regulations

"x" That no data or included in the regulations



| Information on revision

Creation Date	2019/02/20
Revision Date 2020/30/1	
Reason for revision - Brand Name Addition	

Reference

[1] IPCS: The International Chemical Safety Cards (ICSC), website:

http://www.ilo.org/dyn/icsc/showcard.home.

[2]IARC, website: http://www.iarc.fr/.

Water-based color ink

[3]OECD: The Global Portal to Information on Chemical Substances, website:

http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en.

[4]CAMEO Chemicals, website. http://cameochemicals.noaa.gov/search/simple.

[5]NLM: ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.isp. [6]EPA Integrated Risk Information System, website: http://cfpub.epa.gov/ris/.

[7]U.S. Department of Transportation: ERG, website http://www.phmsa.dot.gov/hazmat/library/erg.

[8]Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.da/.

Abbreviations and acronyms

CAS -chemical Abstracts Service

PC-STEL- Short term exposure limit

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment LCss - Lethal Concentration 50%

NOEC -No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

BCF - Bioconcentration factor (BCF)

IMDG-International Maritime Dangerous Goods

UN-The United Nations

NFPA-National Fire Protection Association

CMR - Carcinogens, mutagens or substances toxic to reproduction

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PC-TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC-Predicted No Effect Concentration

LD_{so} - Lethal Dose 50%

ECso - Effective Concentration 50%

POW - Partition coefficient Octanol: Water

vPvB - very Persistent, very Bioaccumulative

ICAO/IATA-International Civil Aviation Organization/International Air.

Transportation Association

ACGIH-American Conference of Governmental Industrial Hygienists

OECD-Organization for Economic Co-operation and Development

Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 7th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.