Trade name: Marabu Printing Ink Screen Set FSC100% MNA 960

Version: 1 / GB
Date revised: 14.10.2021

Substance number: 1703900000082-960
Replaces Version: - / GB
Print date: 07.03.22

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Marabu Printing Ink Screen Set FSC100% MNA 960

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation

Screen printing ink

Identified Uses

SU21	Consumer uses: Private households (= general public = consumers)
PC9a	Coatings and paints, thinners, paint removers

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Marabu GmbH & Co. KG
Asperger Strasse 4
71732 Tamm
Germany

Telephone no.	+49-7141/691-0
Fax no.	+49-7141/691-147
Information provided by / telephone	Department product safety
E-mail address of person responsible for this SDS	PRSI@marabu.com

1.4. Emergency telephone number

(+49) (0)621-60-43333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This product is not classified hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

EUH208 Contains	2-Methyl-2H-isothiazol-3-one, A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1), 1,2-Benzisothiazol-3(2h)-one, May produce an allergic reaction.

Supplemental information

Labelling according to regulation (EU) No 528/2012

Contains a biocidal product: A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients

Pyridin-2-thiol-1-oxide, sodium salt

CAS No.	3811-73-2				
EINECS no.	223-296-5				
Concentration	>=	0,001	<	0,1	%

Classification (Regulation (EC) No. 1272/2008)

Eye Dam. 1	H318
Acute Tox. 4	H302
Acute Tox. 4	H332
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	H400	M = 100

1,2-Benzisothiazol-3(2h)-one

CAS No.	2634-33-5				
EINECS no.	220-120-9				
Concentration			<	0,05	%

Classification (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	H400
Skin Sens. 1	H317
Acute Tox. 4	H302
Skin Irrit. 2	H315
Eye Dam. 1	H318
Acute Tox. 2	H330
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Sens. 1	H317	>= 0,05

2-Methyl-2H-isothiazol-3-one

CAS No.	2682-20-4				
EINECS no.	220-239-6				
Concentration			<	0,0015	%

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 3	H301
Acute Tox. 2	H330
Skin Corr. 1B	H314
Eye Dam. 1	H318
Aquatic Acute 1	H400
Skin Sens. 1A	H317
Aquatic Chronic 1	H410
Acute Tox. 3	H311

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Sens. 1A	H317	>= 0,0015
Aquatic Acute 1	H400	M = 10

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

CAS No.	55965-84-9				
Concentration			<	0,001	%

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 2	H330
Aquatic Chronic 1	H410
Aquatic Acute 1	H400

Skin Sens. 1A	H317
Skin Corr. 1C	H314
Acute Tox. 2	H310
Acute Tox. 3	H301
Eye Dam. 1	H318

Concentration limits (Regulation (EC) No. 1272/2008)

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	M = 100
Aquatic Chronic 1	H410	M = 100
Eye Dam. 1	H318	>= 0,6 %

SECTION 4: First aid measures

4.1. Description of first aid measures

After skin contact

Wash with plenty of water and soap. Do NOT use solvents or thinners.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an oculist.

After ingestion

Rinse mouth thoroughly with water. If larger amounts are swallowed or in the event of symptoms take medical treatment.

4.2. Most important symptoms and effects, both acute and delayed

Until now no symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed

Hints for the physician / treatment

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)

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.

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

Other information

There are not known any further control parameters.

8.2. Exposure controls

Exposure controls

Provide adequate ventilation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid			
Colour	coloured			
Odour	odourless			
Odour threshold				
Remarks	No data available			
pH value				
Value	7	to	9	
Temperature	20	°C		
Method	WTW PH 340			
Melting point				
Remarks	not determined			
Freezing point				
Remarks	not determined			
Initial boiling point and boiling range				
Value	appr. 100			°C
Pressure	1.013	hPa		
Source	Literature value			

Flash point
Remarks: Not applicable

Evaporation rate (ether = 1) :
Remarks: not determined

Flammability (solid, gas)
Not applicable

Upper/lower flammability or explosive limits
Remarks: not determined

Vapour pressure

Value	appr. 23		hPa
Temperature	20	°C	
Method	Value taken from the literature		

Vapour density
Remarks: not determined

Density

Value	1,02		g/cm³
Temperature	20	°C	
Method	DIN EN ISO 2811		

Solubility in water
Remarks: miscible

Ignition temperature
Remarks: not determined

Viscosity

dynamic

Value	10000	to	25000	mPa.s
Temperature	20	°C		
Method	Brookfield			

9.2. Other information

Other information
None known

SECTION 10: Stability and reactivity

10.1. Reactivity
None

10.2. Chemical stability
No hazardous reactions known.

10.3. Possibility of hazardous reactions
No hazardous reactions known.

10.4. Conditions to avoid
No hazardous reactions known.

10.5. Incompatible materials
None

10.6. Hazardous decomposition products
No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

Remarks Based on available data, the classification criteria are not met.

Acute oral toxicity (Components)

1,2-Benzisothiazol-3(2h)-one

Species	rat	
LD50	1193	mg/kg

Acute dermal toxicity

Remarks Based on available data, the classification criteria are not met.

Acute dermal toxicity (Components)

1,2-Benzisothiazol-3(2h)-one

Species	rat	
LD50	4115	mg/kg

Acute inhalational toxicity

Remarks Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Remarks Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Remarks Based on available data, the classification criteria are not met.

Sensitization

Remarks Based on available data, the classification criteria are not met.

Mutagenicity

Remarks Based on available data, the classification criteria are not met.

Reproductive toxicity

Remarks Based on available data, the classification criteria are not met.

Carcinogenicity

Remarks Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (STOT)

Single exposure

Remarks Based on available data, the classification criteria are not met.

Repeated exposure

Remarks Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Experience in practice

Provided all the recommended protective and safety precautions are taken, experience shows that no risk to health can be expected.

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 not classified as dangerous for the environment.

Fish toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	0,188		mg/l
Duration of exposure	96	h	

1,2-Benzisothiazol-3(2h)-one

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	2,18		mg/l
Duration of exposure	96	h	

Daphnia toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	Daphnia magna		
EC50	0,126		mg/l
Duration of exposure	48	h	

1,2-Benzisothiazol-3(2h)-one

Species	Daphnia magna		
EC50	2,94		mg/l
Duration of exposure	48	h	

Algae toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	Selenastrum capricornutum		
EC50	0,027		mg/l
Duration of exposure	72	h	

1,2-Benzisothiazol-3(2h)-one

Species	Pseudokirchneriella subcapitata		
ErC50	0,11		mg/l
Duration of exposure	72	h	

12.2. Persistence and degradability

General information

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

12.4. Mobility in soil

General information

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.

12.6. 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. Transport in bulk according to Annex II of Marpol and the IBC Code

no

SECTION 15: Regulatory information

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

VOC

VOC (EU) 0,06 %

VOC (EU)	0,6	g/l

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	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 3
Acute Tox. 4	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 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Eye Dam. 1	Serious eye damage, Category 1
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Corr. 1C	Skin corrosion, Category 1C
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A

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 guarantee for any specific product properties and shall not establish a legally valid relationship.
The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.
It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.
The product should not be used for purposes other than those shown in Section 1 without first referring 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 own assessment of workplace risks, as required by other health and safety legislation.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Marabu Printing Ink Screen Set FSC100% MNA 974

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation

Screen printing ink

Identified Uses

SU21	Consumer uses: Private households (= general public = consumers)
PC9a	Coatings and paints, thinners, paint removers

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Marabu GmbH & Co. KG
Asperger Strasse 4
71732 Tamm
Germany

Telephone no.	+49-7141/691-0
Fax no.	+49-7141/691-147
Information provided by / telephone	Department product safety
E-mail address of person responsible for this SDS	PRSI@marabu.com

1.4. Emergency telephone number

(+49) (0)621-60-43333

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This product is not classified hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

EUH208 Contains	A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1), 1,2-Benzisothiazol-3(2h)-one, May produce an allergic reaction.

Supplemental information

Labelling according to regulation (EU) No 528/2012

Contains a biocidal product: A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients

Pyridin-2-thiol-1-oxide, sodium salt

CAS No.	3811-73-2				
EINECS no.	223-296-5				
Concentration	>=	0,001	<	0,1	%

Classification (Regulation (EC) No. 1272/2008)

Eye Dam. 1	H318
Acute Tox. 4	H302
Acute Tox. 4	H332
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	H400	M = 100

1,2-Benzisothiazol-3(2h)-one

CAS No.	2634-33-5				
EINECS no.	220-120-9				
Concentration			<	0,05	%

Classification (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	H400
Skin Sens. 1	H317
Acute Tox. 4	H302
Skin Irrit. 2	H315
Eye Dam. 1	H318
Acute Tox. 2	H330
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Sens. 1	H317	>= 0,05

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

CAS No.	55965-84-9				
Concentration			<	0,001	%

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 2	H330
Aquatic Chronic 1	H410
Aquatic Acute 1	H400
Skin Sens. 1A	H317
Skin Corr. 1C	H314
Acute Tox. 2	H310
Acute Tox. 3	H301
Eye Dam. 1	H318

Concentration limits (Regulation (EC) No. 1272/2008)

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	M = 100
Aquatic Chronic 1	H410	M = 100
Eye Dam. 1	H318	>= 0,6 %

SECTION 4: First aid measures

4.1. Description of first aid measures

After skin contact

Wash with plenty of water and soap. Do NOT use solvents or thinners.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an oculist.

After ingestion

Rinse mouth thoroughly with water. If larger amounts are swallowed or in the event of symptoms take medical treatment.

4.2. Most important symptoms and effects, both acute and delayed

Until now no symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed

Hints for the physician / treatment

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 dioxide (CO2); Carbon monoxide (CO); dense black smoke; Nitrogen oxides (NOx)

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.

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

Other information

There are not known any further control parameters.

8.2. Exposure controls

Exposure controls

Provide adequate ventilation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid				
Colour	coloured				
Odour	odourless				
Odour threshold					
Remarks	No data available				
pH value					
Value		7	to	9	
Temperature		20	°C		
Method	WTW PH 340				
Melting point					
Remarks	not determined				
Freezing point					
Remarks	not determined				
Initial boiling point and boiling range					
Value	appr.	100			°C
Pressure		1.013	hPa		
Source	Literature value				
Flash point					
Remarks	Not applicable				
Evaporation rate (ether = 1) :					
Remarks	not determined				
Flammability (solid, gas)					
Not applicable					
Upper/lower flammability or explosive limits					
Remarks	not determined				
Vapour pressure					
Value	appr.	23			hPa
Temperature		20	°C		
Method	Value taken from the literature				
Vapour density					
Remarks	not determined				

Density

Value	1,02			g/cm³
Temperature	20	°C		
Method	DIN EN ISO 2811			

Solubility in water

Remarks: miscible

Ignition temperature

Remarks: not determined

Viscosity

dynamic

Value	10000	to	25000	mPa.s
Temperature	20	°C		
Method	Brookfield			

9.2. Other information

Other information

None known

SECTION 10: Stability and reactivity

10.1. Reactivity

None

10.2. Chemical stability

No hazardous reactions known.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No hazardous reactions known.

10.5. Incompatible materials

None

10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

Remarks: Based on available data, the classification criteria are not met.

Acute oral toxicity (Components)

1,2-Benzisothiazol-3(2h)-one

Species	rat	
LD50	1193	mg/kg

Acute dermal toxicity

Remarks: Based on available data, the classification criteria are not met.

Acute dermal toxicity (Components)

1,2-Benzisothiazol-3(2h)-one

Species	rat	
LD50	4115	mg/kg

Acute inhalational toxicity

Remarks Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Remarks Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Remarks Based on available data, the classification criteria are not met.

Sensitization

Remarks Based on available data, the classification criteria are not met.

Mutagenicity

Remarks Based on available data, the classification criteria are not met.

Reproductive toxicity

Remarks Based on available data, the classification criteria are not met.

Carcinogenicity

Remarks Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (STOT)

Single exposure

Remarks Based on available data, the classification criteria are not met.

Repeated exposure

Remarks Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Experience in practice

Provided all the recommended protective and safety precautions are taken, experience shows that no risk to health can be expected.

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 not classified as dangerous for the environment.

Fish toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	0,188		mg/l
Duration of exposure	96	h	

1,2-Benzisothiazol-3(2h)-one

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	2,18		mg/l
Duration of exposure	96	h	

Daphnia toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and

2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	Daphnia magna		
EC50	0,126		mg/l
Duration of exposure	48	h	

1,2-Benzisothiazol-3(2h)-one

Species	Daphnia magna		
EC50	2,94		mg/l
Duration of exposure	48	h	

Algae toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	Selenastrum capricornutum		
EC50	0,027		mg/l
Duration of exposure	72	h	

1,2-Benzisothiazol-3(2h)-one

Species	Pseudokirchneriella subcapitata		
ErC50	0,11		mg/l
Duration of exposure	72	h	

12.2. Persistence and degradability

General information

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

12.4. Mobility in soil

General information

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.

12.6. 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. Transport in bulk according to Annex II of Marpol and the IBC Code

no

SECTION 15: Regulatory information

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

VOC

VOC (EU)	0,35	%	
VOC (EU)		3,6	g/l

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

H330	Fatal if inhaled.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	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 3
Acute Tox. 4	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 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Eye Dam. 1	Serious eye damage, Category 1
Skin Corr. 1C	Skin corrosion, Category 1C
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A

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 guarantee for any specific product properties and shall not establish a legally valid relationship.
The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.
It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.
The product should not be used for purposes other than those shown in Section 1 without first referring 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 own assessment of workplace risks, as required by other health and safety legislation.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Marabu Printing Ink Screen Set FSC100% MNA 913

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation

Screen printing ink

Identified Uses

SU21	Consumer uses: Private households (= general public = consumers)
PC9a	Coatings and paints, thinners, paint removers

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Marabu GmbH & Co. KG
Asperger Strasse 4
71732 Tamm
Germany

Telephone no.	+49-7141/691-0
Fax no.	+49-7141/691-147
Information provided by / telephone	Department product safety
E-mail address of person responsible for this SDS	PRSI@marabu.com

1.4. Emergency telephone number

(+49) (0)621-60-43333

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

This product is not classified hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

EUH208 Contains ***	2-Methyl-2H-isothiazol-3-one, A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1), 1,2-Benzisothiazol-3(2h)-one, May produce an allergic reaction.

Supplemental information

Labelling according to regulation (EU) No 528/2012

Contains a biocidal product: A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients ***

3.2. Mixtures

Hazardous ingredients *

Pyridin-2-thiol-1-oxide, sodium salt

CAS No.	3811-73-2				
EINECS no.	223-296-5				
Concentration	>=	0,001	<	0,1	%

Classification (Regulation (EC) No. 1272/2008)

Eye Dam. 1	H318
Acute Tox. 4	H302
Acute Tox. 4	H332
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	H400	M = 100

1,2-Benzisothiazol-3(2h)-one

CAS No.	2634-33-5				
EINECS no.	220-120-9				
Concentration			<	0,05	%

Classification (Regulation (EC) No. 1272/2008)

Aquatic Acute 1	H400
Skin Sens. 1	H317
Acute Tox. 4	H302
Skin Irrit. 2	H315
Eye Dam. 1	H318
Acute Tox. 2	H330
Aquatic Chronic 2	H411

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Sens. 1	H317	>= 0,05

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

CAS No.	55965-84-9				
Concentration			<	0,001	%

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 2	H330
Aquatic Chronic 1	H410
Aquatic Acute 1	H400
Skin Sens. 1A	H317
Skin Corr. 1C	H314
Acute Tox. 2	H310
Acute Tox. 3	H301
Eye Dam. 1	H318

Concentration limits (Regulation (EC) No. 1272/2008)

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	M = 100
Aquatic Chronic 1	H410	M = 100
Eye Dam. 1	H318	>= 0,6 %

2-Methyl-2H-isothiazol-3-one

CAS No.	2682-20-4
EINECS no.	220-239-6

Concentration < 0,0015 %

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 3	H301
Acute Tox. 2	H330
Skin Corr. 1B	H314
Eye Dam. 1	H318
Aquatic Acute 1	H400
Skin Sens. 1A	H317
Aquatic Chronic 1	H410
Acute Tox. 3	H311

Concentration limits (Regulation (EC) No. 1272/2008)

Skin Sens. 1A	H317	>= 0,0015
Aquatic Acute 1	H400	M = 10

SECTION 4: First aid measures

4.1. Description of first aid measures

After skin contact

Wash with plenty of water and soap. Do NOT use solvents or thinners.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). In case of irritation consult an oculist.

After ingestion

Rinse mouth thoroughly with water. If larger amounts are swallowed or in the event of symptoms take medical treatment.

4.2. Most important symptoms and effects, both acute and delayed

Until now no symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed

Hints for the physician / treatment

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)

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.

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

Other information

There are not known any further control parameters.

8.2. Exposure controls

Exposure controls

Provide adequate ventilation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid			
Colour	red			
Odour	odourless			
Odour threshold				
Remarks	No data available			
pH value				
Value	7	to	9	
Temperature	20	°C		
Method	WTW PH 340			
Melting point				
Remarks	not determined			
Freezing point				
Remarks	not determined			
Initial boiling point and boiling range				
Value	appr. 100			°C
Pressure	1.013	hPa		
Source	Literature value			

Flash point
Remarks: Not applicable

Evaporation rate (ether = 1) :
Remarks: not determined

Flammability (solid, gas)
Not applicable

Upper/lower flammability or explosive limits
Remarks: not determined

Vapour pressure

Value	appr. 23		hPa
Temperature	20	°C	
Method	Value taken from the literature		

Vapour density
Remarks: not determined

Density

Value	1,02		g/cm³
Temperature	20	°C	
Method	DIN EN ISO 2811		

Solubility in water
Remarks: miscible

Ignition temperature
Remarks: not determined

Viscosity

dynamic

Value	10000	to	25000	mPa.s
Temperature	20	°C		
Method	Brookfield			

9.2. Other information

Other information
None known

SECTION 10: Stability and reactivity

10.1. Reactivity
None

10.2. Chemical stability
No hazardous reactions known.

10.3. Possibility of hazardous reactions
No hazardous reactions known.

10.4. Conditions to avoid
No hazardous reactions known.

10.5. Incompatible materials
None

10.6. Hazardous decomposition products
No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

Remarks Based on available data, the classification criteria are not met.

Acute oral toxicity (Components)

1,2-Benzisothiazol-3(2h)-one

Species	rat	
LD50	1193	mg/kg

Acute dermal toxicity

Remarks Based on available data, the classification criteria are not met.

Acute dermal toxicity (Components)

1,2-Benzisothiazol-3(2h)-one

Species	rat	
LD50	4115	mg/kg

Acute inhalational toxicity

Remarks Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Remarks Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Remarks Based on available data, the classification criteria are not met.

Sensitization

Remarks Based on available data, the classification criteria are not met.

Mutagenicity

Remarks Based on available data, the classification criteria are not met.

Reproductive toxicity

Remarks Based on available data, the classification criteria are not met.

Carcinogenicity

Remarks Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (STOT)

Single exposure

Remarks Based on available data, the classification criteria are not met.

Repeated exposure

Remarks Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Experience in practice

Provided all the recommended protective and safety precautions are taken, experience shows that no risk to health can be expected.

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 not classified as dangerous for the environment.

Fish toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	0,188		mg/l
Duration of exposure	96	h	

1,2-Benzisothiazol-3(2h)-one

Species	rainbow trout (Oncorhynchus mykiss)		
LC50	2,18		mg/l
Duration of exposure	96	h	

Daphnia toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	Daphnia magna		
EC50	0,126		mg/l
Duration of exposure	48	h	

1,2-Benzisothiazol-3(2h)-one

Species	Daphnia magna		
EC50	2,94		mg/l
Duration of exposure	48	h	

Algae toxicity (Components)

A mixture of: 5-Chloro-2-methyl-2h-isothiazol-3-one [EC-no. 247-500-7] and 2-Methyl-2H-isothiazol-3-one [EC-no. 220-239-6] (3:1) / C(M)IT/MIT (3:1)

Species	Selenastrum capricornutum		
EC50	0,027		mg/l
Duration of exposure	72	h	

1,2-Benzisothiazol-3(2h)-one

Species	Pseudokirchneriella subcapitata		
ErC50	0,11		mg/l
Duration of exposure	72	h	

12.2. Persistence and degradability

General information

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

12.4. Mobility in soil

General information

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.

12.6. 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. Transport in bulk according to Annex II of Marpol and the IBC Code

no

SECTION 15: Regulatory information

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

VOC

VOC (EU) 0,15 %

VOC (EU)	1,5	g/l

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	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 3
Acute Tox. 4	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 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Eye Dam. 1	Serious eye damage, Category 1
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Corr. 1C	Skin corrosion, Category 1C
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A

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 guarantee for any specific product properties and shall not establish a legally valid relationship.
The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.
It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.
The product should not be used for purposes other than those shown in Section 1 without first referring 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 own assessment of workplace risks, as required by other health and safety legislation.