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

1.1. Product identifier

H1 1 L

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

Use of the substance/preparation

Screen and pad printing auxiliary

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

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

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

Flam. Liq. 3	H226
Acute Tox. 4	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
STOT SE 3	H335
STOT RE 2	H373

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Warning

Hazard statements

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements ***

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260.8	Do not breathe vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTRE or doctor if you feel unwell.

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains Ethyl benzene; Hexamethylene diisocyanate; Xylene; Hexamethylene-1,6-diisocyanate, homopolymer

Supplemental information

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Polyfunctional aliphatic isocyanate in solvents

Hazardous ingredients

Hexamethylene-1,6-diisocyanate, homopolymer

CAS No. 28182-81-2

Concentration >= 54 < 75 %

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

Skin Sens. 1	H317
Acute Tox. 4	H332
STOT SE 3	H335

2-Methoxy-1-methylethyl acetate

CAS No. 108-65-6

EINECS no. 203-603-9

Registration no. 01-2119475791-29

Concentration >= 10 < 20 %

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

Flam. Liq. 3	H226
STOT SE 3	H336

Xylene

CAS No. 1330-20-7

EINECS no. 215-535-7

Registration no. 01-2119488216-32/01-2119486136-34

Concentration >= 10 < 12 %

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

Skin Irrit. 2	H315
Flam. Liq. 3	H226
Acute Tox. 4	H332
Acute Tox. 4	H312
Eye Irrit. 2	H319
STOT SE 3	H335
STOT RE 2	H373
Asp. Tox. 1	H304
Aquatic Chronic 3	H412

Ethyl benzene

CAS No.	100-41-4			
EINECS no.	202-849-4			
Registration no.	01-2119489370-35			
Concentration	>= 1	<	2	%

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

Flam. Liq. 2	H225	
Acute Tox. 4	H332	
STOT RE 2	H373	Ear
Asp. Tox. 1	H304	
Aquatic Chronic 3	H412	

Hexamethylene diisocyanate

CAS No.	822-06-0			
EINECS no.	212-485-8			
Registration no.	01-2119457571-37			
Concentration	>= 0,1	<	0,21	%

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

Acute Tox. 1	H330
Eye Irrit. 2	H319
STOT SE 3	H335
Skin Irrit. 2	H315
Resp. Sens. 1	H334
Skin Sens. 1	H317
Acute Tox. 4	H302

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

Resp. Sens. 1	H334	>= 0,5
Skin Sens. 1	H317	>= 0,5

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

After inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After skin contact

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Recommended: alcohol resistant foam, CO2, powders, water spray/mist, Not be used for safety reasons: water jet

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); Hydrogen cyanide (HCN)

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Do not allow to enter drains or waterways. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth. Place in a suitable container. The contaminated area should be cleaned up immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts), concentrated (d = 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts), water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in non-sealed container. Once this stage is reached, close container and dispose according to local regulations (see section 13).

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

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Care should be taken when re-opening partly used containers. Precautions should be taken to minimise exposure to atmospheric humidity or water: CO2 will be formed which in closed containers can result in pressurisation. Isolate from sources of heat, sparks and open flame. No sparking tools should be used. Avoid skin and eye contact. Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Smoking, eating and drinking shall be prohibited in application area. For personal protection see Section 8. Never use pressure to empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or water courses.

Advice on protection against fire and explosion

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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

Classification of fires	B (Combustible liquid substances)
Temperature class	T2

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Electrical installations/working materials must comply with the local applied technological safety standards. Storage rooms in which filling operations take place must have a conducting floor. Store in accordance with national regulation

Hints on storage assembly

Store away from oxidising agents, from strongly alkaline and strongly acid materials as well as amines, alcohols and water.

Further information on storage conditions

Observe label precautions. Store between 15 and 30 °C in a dry, well ventilated place away from sources of heat and direct sunlight. Keep container tightly closed. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

Screen and pad printing auxiliary

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Derived No/Minimal Effect Levels (DNEL/DMEL)

Xylene

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	221	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	

Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	442	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	221	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	442	mg/m³
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	212	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	65,3	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	260	mg/m³
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	65,3	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	260	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	125	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	12,5	mg/kg/d

2-Methoxy-1-methylethyl acetate

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	796	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	275	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	320	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	33	mg/m³
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	33	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	36	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Lifetime	
Route of exposure	inhalative	
Mode of action	Local effects	

Concentration	550	mg/m³

Hexamethylene-1,6-diisocyanate, homopolymer

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	0,5	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	1	mg/m³

Ethyl benzene

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	77	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	293	mg/m³

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	180	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	15	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long term	
Route of exposure	oral	
Mode of action	Systemic effects	
Concentration	1,6	mg/kg/d

Hexamethylene diisocyanate

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	

Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	0,035	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Short term	
Route of exposure	inhalative	
Mode of action	Acute effects	
Concentration	0,07	mg/m³

Predicted No Effect Concentration (PNEC)

Xylene

Type of value	PNEC	
Type	Freshwater	
Concentration	0,327	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,327	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	12,46	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	12,46	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	2,31	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	6,58	mg/l
Type of value	PNEC	
Type	Water (intermittent release)	
Concentration	0,327	mg/l

2-Methoxy-1-methylethyl acetate

Reference substance	2-Methoxy-1-methylethyl acetate	
Type of value	PNEC	
Type	Freshwater	
Concentration	0,635	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	3,29	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,29	mg/kg
Source	Literature value	
Type of value	PNEC	

Type	Sewage treatment plant (STP)	
Concentration	100	mg/l
Source	Literature value	
Type of value	PNEC	
Type	Marine sediment	
Concentration	0,329	mg/kg
Source	Literature value	
Type of value	PNEC	
Type	Saltwater	
Concentration	0,0635	mg/l

Hexamethylene-1,6-diisocyanate, homopolymer

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	6,46	mg/l

Ethyl benzene

Type of value	PNEC	
Type	Freshwater	
Concentration	0,1	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,01	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	9,6	mg/l
Type of value	PNEC	
Type	Freshwater sediment	
Concentration	13,7	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	1,37	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	2,68	mg/kg

Hexamethylene diisocyanate

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	8,42	mg/l

8.2. Exposure controls

Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by spray operator even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. (See Personal Protection.). Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes.

Wet [sanding]/[flatting] should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used. Under cool dry conditions, it is possible for the isocyanate to remain unreacted in the paint film for up to 30 hours after application. If dry flatting is unavoidable air fed respiratory protective equipment should be used.

Respiratory protection

When spraying: air fed respirator. For operations other than spraying: In well ventilated areas, air-fed respirators could be replaced by a combination of charcoal filter and particulate filter mask. Short term: filter apparatus, combination filter A-P2

Hand protection

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 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

Use safety eyewear designed to protect against splash of liquids.

Body protection

Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	colourless to yellowish
Odour	solvent-like

Odour threshold

Remarks	No data available

pH value

Remarks	Not applicable

Melting point

Remarks	not determined

Freezing point

Remarks	not determined

Initial boiling point and boiling range

Value	appr.	139,5	°C
Pressure		1.013	hPa
Source	Literature value		

Flash point

Value	39	°C
Method	ASTM D 6450 (CCCFP)	

Evaporation rate (ether = 1) :

Remarks	not determined				

Flammability (solid, gas)

Not applicable

Upper/lower flammability or explosive limits

Lower explosion limit	appr.	1,1			%(V)
Upper explosion limit	appr.	10,8			%(V)
Source	Literature value				

Vapour pressure

Value	appr.	10			hPa
Temperature		20	°C		
Method	calculated				

Vapour density

Remarks	not determined				

Density

Value		1,070			g/cm³
Temperature		20	°C		

Solubility in water

Remarks	partially miscible				

Partition coefficient: n-octanol/water

Remarks	Not applicable				

Ignition temperature

Value		425			°C

Viscosity

dynamic

Value		150	to	400	mPa.s
Temperature		20	°C		
Method	Brookfield				

kinematic

Value		90			mm²/s
Temperature		40	°C		

Efflux time

Value	<	12			s
Method	DIN 53211 4 mm				

Explosive properties

evaluation	no

Oxidising properties

evaluation	None known

9.2. Other information

Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

10.1. Reactivity

The product reacts slowly with water resulting in evolution of carbon dioxide.

10.2. Chemical stability

Stable under recommended storage and handling conditions (see section 7).

10.3. Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials, amines, alcohols and water. In closed containers, pressure build up could result in distortion, blowing and in extreme cases bursting of the container.

10.4. Conditions to avoid

In a fire, hazardous decomposition products may be produced.

10.5. Incompatible materials

Uncontrolled exothermic reactions occur with amines and alcohols.

10.6. Hazardous decomposition products

such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, monomeric isocyanates.

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)

Hexamethylene diisocyanate

Species	rat		
LD50		746	mg/kg
Method	OECD 401		

Acute dermal toxicity

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

Acute dermal toxicity (Components)

Xylene

Species	rabbit		
LD50	>	4200	mg/kg

Acute inhalational toxicity

ATE		11,635	mg/l
Administration/Form	Vapors		
Method	calculated value (Regulation (EC) No. 1272/2008)		
ATE		1,0115	mg/l
Administration/Form	Dust/Mist		
Method	calculated value (Regulation (EC) No. 1272/2008)		
Remarks	The classification criteria are met.		

Acute inhalative toxicity (Components)

Xylene

Species	rat			
LC50	>	29		mg/l
Duration of exposure		4	h	
Administration/Form	Vapors			

Hexamethylene diisocyanate

Species	rat		
LC50		0,124	mg/l
Administration/Form	Vapors		
Method	OECD 403		

Skin corrosion/irritation

evaluation	irritant
Remarks	The classification criteria are met.

Skin corrosion/irritation (Components)

2-Methoxy-1-methylethyl acetate

Species	rabbit
evaluation	non-irritant

Serious eye damage/irritation

evaluation	irritant
Remarks	The classification criteria are met.

Sensitization

evaluation	May cause sensitization by skin contact.
Remarks	The classification criteria are 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	The classification criteria are met.
evaluation	May cause respiratory irritation.

Repeated exposure

Remarks	The classification criteria are met.
evaluation	May cause damage to organs through prolonged or repeated exposure

Aspiration hazard

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

Experience in practice

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Irritating to skin. May cause an allergic skin reaction. The liquid splashed in the eyes may cause irritation and 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 not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for further details.

12.2. Persistence and degradability

General information

No data available

12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

Partition coefficient: n-octanol/water

Remarks Not applicable

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.
Residues in empty containers should be neutralised with decontaminant (see section 6).
Wastes and emptied containers should be classified in accordance with relevant national regulation.
The European Waste Catalogue classification of this product, when disposed of as waste is
EWC waste code 08 03 12* waste ink containing dangerous substances
If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.
For further information contact your local waste authority.

Disposal recommendations for packaging

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.
Empty containers must be scrapped or reconditioned.
Not emptied containers are hazardous waste (waste code number 150110).

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	D/E		
14.1. UN number	1263	1263	1263
14.2. UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
14.3. Transport hazard class(es)	3	3	3
Label			
14.4. Packing group	III	III	III
Special provision	640E		
Limited Quantity	5 l		
Transport category	3		
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

Other information

The product does not contain substances of very high concern (SVHC).

Other information

All components are contained in the AICS inventory.
All components are contained in the PICCS inventory.
All components are contained in the DSL inventory.
All components are contained in the IECSC inventory.
All components are contained in the ECL inventory.
All components are contained in the NZIOC inventory.
All components are contained in the ENCS inventory.
All components are contained in the TSCA inventory or exempted.

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Acute Tox. 1	Acute toxicity, Category 1
Acute Tox. 4	Acute toxicity, Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Resp. Sens. 1	Respiratory sensitization, Category 1
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

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.