1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Hesse UV Basecoat for roller coating clear UG 7430

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

Use of the substance/preparation

Surface treatment of wood and other materials

Identified Uses

	REACHSET 1002
SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
PROCh02	roller coating industrial

1.3. Details of the supplier of the safety data sheet

Manufacturer

Hesse GmbH & Co. KG
Warendorfer Strasse 21
59075 Hamm

Telephone no.	+49 (0) 2381 963-00
Fax no.	+49 (0) 2381 963-849
E-mail address	ps@hesse-lignal.de

1.4. Emergency telephone number

Germany: +49 (0) 2381 788-612

2. Hazards identification

2.1. Classification of the substance or mixture

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

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

Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1A	H317
Aquatic Chronic 2	H411

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Danger

Hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264.1	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.

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

contains oxybis(methyl-2,1-ethanediyl) diacrylate; salt of polyamine amide; Hexanedioic acid, polymer with 2-(chloromethyl)oxirane, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,3-propanediol, 2,2-bis(hydroxymethyl)- and 1,3-isobenzofurandione, 2-propenoate; glycerol, propoxylated, esters with acrylic acid

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB) (if not listed in Section 3).

3. Composition/information on ingredients

Hazardous ingredients

Hexanedioic acid, polymer with 2-(chloromethyl)oxirane, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,3-propanediol, 2,2-bis(hydroxymethyl)- and 1,3-isobenzofurandione, 2-propenoate

Concentration >= 50 %

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

Eye Dam. 1	H318
Skin Sens. 1	H317
Aquatic Chronic 2	H411

oxybis(methyl-2,1-ethanediyl) diacrylate

CAS No. 57472-68-1
EINECS no. 260-754-3
Registration no. 01-2119484629-21
Concentration >= 10 < 25 %

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

Eye Dam. 1	H318
Skin Irrit. 2	H315
Skin Sens. 1	H317

glycerol, propoxylated, esters with acrylic acid

CAS No. 52408-84-1

EINECS no. 500-114-5
Registration no. 01-2119487948-12
Concentration >= 1 < 10 %
Classification (Regulation (EC) No. 1272/2008)
Eye Irrit. 2 H319
Skin Sens. 1 H317

benzophenone
CAS No. 119-61-9
EINECS no. 204-337-6
Registration no. 01-2119899704-20
Concentration >= 1 < 10 %
Classification (Regulation (EC) No. 1272/2008)
STOT RE 2 H373 Liver, Kidneys
Aquatic Chronic 3 H412

tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine
CAS No. 111497-86-0
EINECS no. 601-101-8
Registration no. 01-2119961351-42
Concentration >= 1 < 10 %
Classification (Regulation (EC) No. 1272/2008)
Eye Irrit. 2 H319
Skin Irrit. 2 H315
Skin Sens. 1B H317

2-hydroxy-2-methylpropiophenone
CAS No. 7473-98-5
EINECS no. 231-272-0
Registration no. 01-2119472306-39
Concentration >= 1 < 10 %
Classification (Regulation (EC) No. 1272/2008)
Acute Tox. 4 H302 Route of exposure: Oral exposure

salt of polyamine amide
CAS No. 162627-17-0
EINECS no. 605-296-0
Registration no. 01-2119970640-38
Concentration >= 0,1 < 1 %
Classification (Regulation (EC) No. 1272/2008)
Skin Sens. 1A H317

Note

For explanation of abbreviations see section 16.
This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57) (if not listed in Section 3).

4. First aid measures

4.1. Description of first aid measures

General information

In case of accidental skin or eye contact, avoid exposure to ultra-violet light. In all cases of doubt, or when symptoms persist, seek medical attention. If unconscious place in recovery position and seek medical advice. First aider: Pay attention to self-protection! Remove affected person from danger area, lay him down.

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. Keep warm, calm and covered up. In all cases of doubt, or when symptoms persist, seek medical attention.

After skin contact

Wash off immediately with soap and water. Do NOT use solvents or thinners. Consult a doctor if skin irritation persists.

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. Take medical treatment.

After ingestion

Do not induce vomiting. Take medical treatment.

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

Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

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

Hints for the physician / treatment

Treat symptomatically.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Recommended: alcohol resistant foam, CO2, powders, water spray/mist

Non suitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Fire will produce dense black smoke. In a fire, hazardous decomposition products may be produced. Exposure to decomposition products may cause a health hazard. Vapours can form an explosive mixture with air.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

In case of combustion evolution of dangerous gases possible. Use self-contained breathing apparatus.

Other information

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

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Do not inhale vapours. Do not inhale gases. Do not inhale mist.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not allow to enter soil, waterways or waste water canal. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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 and place in container for disposal according to local regulations (see section 13). Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Do NOT use solvents or thinners. Send in suitable containers for recovery or disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

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. Keep container tightly closed and dry in a cool, well-ventilated place. Use only with adequate ventilation/personal protection. Ensure adequate ventilation. Provide for sufficient ventilation. This can be achieved by local exhaust or general exhaust air collection. Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values. Avoid contact with skin and eyes. Avoid inhalation of vapour and spray mist. Do no eat, drink or smoke when using this product. Use personal protective clothing. For personal protection see Section 8.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Vapours are heavier than air and may spread along floors. Take measures to prevent the build up of electrostatic charge. Fight fire with normal precautions from a reasonable distance.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Provide solvent-resistant and impermeable floor. Keep only in the original container in a cool, well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Hints on storage assembly

Store away from oxidising agents, from strongly alkaline and strongly acid materials.

Storage classes

Storage class according to TRGS 510	10	Flammable liquids

Further information on storage conditions

Protect from frost. Protect from heat and direct sunlight. Keep away from sources of ignition - No smoking. Store in accordance with the particular national regulations.

7.3. Specific end use(s)

See exposure scenario, if available.

8. Exposure controls/personal protection

8.1. Control parameters

Other information

-

Derived No/Minimal Effect Levels (DNEL/DMEL)

oxybis(methyl-2,1-ethanediyl) diacrylate

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	2,77	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	24,48	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	1,66	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	7,24	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	Systemic effects	
Concentration	2,08	mg/kg/d

glycerol, propoxylated, esters with acrylic acid

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	1,92	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	16,2	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	1,15	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	4,87	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	Systemic effects	
Concentration	1,39	mg/kg/d

2-hydroxy-2-methylpropiophenone

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	3,5	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	3,5	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	1,25	mg/kg

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	1,25	mg/kg

benzophenone

Type of value	Derived No Effect Level (DNEL)

Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	26,4	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,7	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	0,1	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	0,17	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	Systemic effects	
Concentration	0,05	mg/kg/d

tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	23,51	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	3,33	mg/kg/d

Predicted No Effect Concentration (PNEC)

oxybis(methyl-2,1-ethanediyl) diacrylate

Type of value	PNEC

Type	Freshwater	
Concentration	0,0034	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,00034	mg/l
Type of value	PNEC	
Conditions	sporadic release	
Concentration	0,034	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	0,00884	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	0,000884	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,0013	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l

glycerol, propoxylated, esters with acrylic acid

Type of value	PNEC	
Type	Freshwater	
Concentration	0,00574	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,000574	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	0,01697	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	0,001697	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,00111	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	10	mg/l

2-hydroxy-2-methylpropiophenone

Type of value	PNEC	
Type	Freshwater	
Concentration	0,00195	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,000195	mg/l
Type of value	PNEC	
Conditions	sporadic release	
Concentration	0,0195	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	0,00514	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	0,000514	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,000674	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	45	mg/l

benzophenone

Type of value	PNEC	
Type	Freshwater	
Concentration	0,02	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,002	mg/l
Type of value	PNEC	
Conditions	sporadic release	
Concentration	0,035	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	1,1	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	0,11	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,31	mg/kg

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	3,16	mg/l

tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine

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	
Conditions	sporadic release	
Concentration	1	mg/l

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	100	mg/l

8.2. Exposure controls

Exposure controls

Users are advised to consider national Occupational Exposure Limits or other equivalent values. Provide for sufficient ventilation. This can be achieved by local exhaust or general exhaust air collection. Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values.

Hand protection

Protective gloves complying with EN 374.

Glove material			
Multilayer gloves made from			
Appropriate Material	Fluorinated rubber / butyl-rubber		
Material thickness	>=	0,7	mm
Breakthrough time	>=	30	min

This recommendation is valid only for the product named in this safety data sheet supplied by us, and only for the indicated intended use purposes.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
The breakthrough time must be greater than the end use time of the product.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

Eye protection

Wear eye glasses with side protection according to EN 166.

Body protection

Wear suitable protective clothing. Remove contaminated clothing and wash it before reuse. Wash hands before breaks and after work.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid			
Colour	colourless			
Odour	acrylic-like			
Odour threshold				
Remarks	not determined			
Melting point				
Remarks	not determined			
Freezing point				
Remarks	not determined			
Initial boiling point and boiling range				
Remarks	Not applicable			
Flash point				
Value	>	60		°C
Evaporation rate				
Remarks	not determined			
Flammability (solid, gas)				
not determined				
Upper/lower flammability or explosive limits				
Remarks	not determined			
Vapour pressure				
Remarks	not determined			
Vapour density				
Remarks	not determined			
Density				
Value	appr.	1,233		kg/l
Temperature		20	°C	
Solubility in water				
Remarks	not determined			
Solubility(ies)				
Remarks	not determined			
Partition coefficient: n-octanol/water				
Remarks	not determined			
Ignition temperature				
Remarks	not determined			
Decomposition temperature				
Remarks	not determined			
Viscosity				
Remarks	not determined			
Efflux time				

Value	81	to	109	s
Temperature	20	°C		
Method	DIN 53211 - 8 mm			

Explosive properties

evaluation: not determined

Oxidising properties

Remarks: not determined

9.2. Other information

Non-volatile content

Value	99,6	%
Method	calculated value	

Other information

This information is not available.

10. Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

To avoid thermal decomposition, do not overheat.

10.4. Conditions to avoid

This mixture contains materials which are unstable under the following conditions: exposure to heat (>50°C), strong UV sources. These could cause the product to polymerise exothermically.

10.5. Incompatible materials

Keep away from free radical initiators, peroxides, strong alkalis or reactive metals.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide, nitrous oxides (NOx), dense black smoke, No decomposition if used as prescribed.

11. Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

ATE	>	10.000	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)		
Remarks	Based on available data, the classification criteria are not met.		

Acute oral toxicity (Components)

2-hydroxy-2-methylpropiophenone

Species	rat	
LD50	1694	mg/kg

Acute dermal toxicity

Method	Calculation method (Regulation (EC) No. 1272/2008)
Remarks	Based on available data, the classification criteria are not met.

Acute inhalational toxicity

Method	Calculation method (Regulation (EC) No. 1272/2008)
Remarks	Based on available data, the classification criteria are not met.

Skin corrosion/irritation

evaluation	irritant
Method	Calculation method (Regulation (EC) No. 1272/2008)
Remarks	The classification criteria are met.

Skin corrosion/irritation (Components)

oxybis(methyl-2,1-ethanediyl) diacrylate

evaluation	Skin irritation

tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine

Species	rabbit
Observation Period	14 d
evaluation	Irritating to skin.

Serious eye damage/irritation

evaluation	corrosive
Method	Calculation method (Regulation (EC) No. 1272/2008)
Remarks	The classification criteria are met.

Serious eye damage/irritation (Components)

oxybis(methyl-2,1-ethanediyl) diacrylate

Species	rabbit

glycerol, propoxylated, esters with acrylic acid

evaluation	Irritating to eyes.

Hexanedioic acid, polymer with 2-(chloromethyl)oxirane, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,3-propanediol, 2,2-bis(hydroxymethyl)- and 1,3-isobenzofurandione, 2-propenoate

evaluation	irritant - risk of serious damage to eyes

Sensitization

evaluation	May cause sensitization by skin contact.
Method	Calculation method (Regulation (EC) No. 1272/2008)
Remarks	The classification criteria are met.

Sensitization (Components)

oxybis(methyl-2,1-ethanediyl) diacrylate

evaluation	May cause sensitization by skin contact.

glycerol, propoxylated, esters with acrylic acid

evaluation	May cause sensitization by skin contact.

tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine

evaluation	May cause sensitization by skin contact.

salt of polyamine amide

evaluation	May cause sensitization by skin contact.

Hexanedioic acid, polymer with 2-(chloromethyl)oxirane, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,3-propanediol, 2,2-bis(hydroxymethyl)- and 1,3-isobenzofurandione, 2-propenoate

evaluation	May cause sensitization by skin contact.

Mutagenicity

Method	Calculation method (Regulation (EC) No. 1272/2008)

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

Reproductive toxicity

Method Calculation method (Regulation (EC) No. 1272/2008)
Remarks Based on available data, the classification criteria are not met.

Carcinogenicity

Method Calculation method (Regulation (EC) No. 1272/2008)
Remarks Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (STOT)

Single exposure
Method Calculation method (Regulation (EC) No. 1272/2008)
Remarks Based on available data, the classification criteria are not met.

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

Specific Target Organ Toxicity (STOT) (Components)

benzophenone

Specific target organ toxicity - repeated exposure
Organs: Liver, Kidneys
Remarks May cause damage to organs through prolonged or repeated exposure:

Aspiration hazard

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

Other information

No toxicological data are available.

12. Ecological information

12.1. Toxicity

General information

For this subsection there is no ecotoxicological data available on the product as such.

Fish toxicity (Components)

glycerol, propoxylated, esters with acrylic acid

Species	Danio rerio (zebra fish)			
NOEC		1,59		mg/l
Duration of exposure	=	96	h	
Method	OECD 203			

glycerol, propoxylated, esters with acrylic acid

Species	Danio rerio (zebra fish)			
LC50		5,74		mg/l
Duration of exposure	=	96	h	
Method	OECD 203			

2-hydroxy-2-methylpropiophenone

Species	Leuciscus idus (Golden orfe)			
LC50		160		mg/l
Duration of exposure		48	h	

Hexanedioic acid, polymer with 2-(chloromethyl)oxirane, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,3-propanediol, 2,2-bis(hydroxymethyl)- and 1,3-isobenzofurandione, 2-propenoate

Species	Fish				
		1	to	10	mg/l
Duration of exposure		96	h		

Daphnia toxicity (Components)

glycerol, propoxylated, esters with acrylic acid

Species	Daphnia magna (Water flea)			
EC50		91,4		mg/l
Duration of exposure	=	48	h	
Method	OECD Test Guideline 202			

2-hydroxy-2-methylpropiophenone

Species	Daphnia magna (Water flea)			
EC50	>	119		mg/l
Duration of exposure		48	h	
Method	OECD Test Guideline 202			

benzophenone

Species	Daphnia magna (Water flea)			
EC50		6,8		mg/l
Duration of exposure		48	h	
Method	OECD 202, part 1, static			

benzophenone

Species	Daphnia magna (Water flea)			
NOEC		0,2		mg/l
Duration of exposure		7	d	

tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine

Species	Daphnia magna (Water flea)			
EC50	>	100		mg/l
Duration of exposure		48	h	
Method	OECD 202, part 1, static			

Algae toxicity (Components)

glycerol, propoxylated, esters with acrylic acid

Species	Desmodesmus subspicatus			
EC50		12,2		mg/l
Duration of exposure	=	72	h	
Method	OECD 201			

2-hydroxy-2-methylpropiophenone

Species	Desmodesmus subspicatus			
EC50		1,95		mg/l
Duration of exposure		72	h	
Method	OECD 201			

Bacteria toxicity (Components)

2-hydroxy-2-methylpropiophenone

Species	activated sludge			
EC50	>	1000		mg/l
Duration of exposure		3	h	

12.2. Persistence and degradability

General information

For this subsection there is no ecotoxicological data available on the product as such.

Biodegradability (Components)

glycerol, propoxylated, esters with acrylic acid

evaluation	Readily biodegradable.			

2-hydroxy-2-methylpropiophenone

Value	90	to	100	%
Duration of test	28	d		
evaluation	Readily biodegradable.			

benzophenone

Value	0,0			%
Duration of test	14	d		
evaluation	Not readily biodegradable.			

12.3. Bioaccumulative potential

General information

For this subsection there is no ecotoxicological data available on the product as such.

Partition coefficient: n-octanol/water

Remarks not determined

12.4. Mobility in soil

General information

For this subsection there is no ecotoxicological data available on the product as such.

Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

General information

For this subsection there is no ecotoxicological data available on the product as such.

12.6. Other adverse effects

General information

For this subsection there is no ecotoxicological data available on the product as such.

General information / ecology

For this subsection there is no ecotoxicological data available on the product as such.

13. Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

EWC waste code	080111 - waste paint and varnish containing organic solvents or other dangerous substances
EWC waste code	200127 - paint, inks, adhesives and resins containing dangerous substances

Where possible recycling is preferred to disposal or incineration.
Do not allow to enter drains or waterways.

modified product

EWC waste code	080113 - sludges from paint or varnish containing organic solvents or other dangerous substances
EWC waste code	080115 - aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances

Dried residues

EWC waste code 080112 - waste lacquers and waste paint except those falling under 080111

Disposal recommendations for packaging

EWC waste code 150110 - packaging containing residues of or contaminated by dangerous substances

Fully drained containers which are drop- and scrape-free can be treated as industrial waste, and can possibly be recycled.

14. Transport information

	Land transport ADR/RID	**Marine transport IMDG/GGVSee**	**Air transport ICAO/IATA**
Tunnel restriction code	E		
14.1. UN number	3082	3082	3082
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hexanedioic acid, polymer with 2-(chloromethyl)oxirane, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,3-propanediol, 2,2-bis(hydroxymethyl)- and 1,3-isobenzofurandione, 2-propenoate, 2,6-di-tert-butyl-p-cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hexanedioic acid, polymer with 2-(chloromethyl)oxirane, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,3-propanediol, 2,2-bis(hydroxymethyl)- and 1,3-isobenzofurandione, 2-propenoate, 2,6-di-tert-butyl-p-cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hexanedioic acid, polymer with 2-(chloromethyl)oxirane, 1,2-ethanediol, 2-ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,3-propanediol, 2,2-bis(hydroxymethyl)- and 1,3-isobenzofurandione, 2-propenoate, 2,6-di-tert-butyl-p-cresol)
14.3. Transport hazard class(es)	9	9	9
Label			
14.4. Packing group	III	III	III
Limited Quantity	5 l		
Transport category	3		
14.5. Environmental hazards	 ENVIRONMENTALLY HAZARDOUS	 ENVIRONMENTALLY HAZARDOUS	 ENVIRONMENTALLY HAZARDOUS

15. Regulatory information

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

VOC

VOC (EU)	0,4	%	5	g/l

Other information

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 substance / mixture a chemical safety assessment was not carried out.

16. Other information

Hazard statements listed in Chapter 3

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1A	Skin sensitization, Category 1A
Skin Sens. 1B	Skin sensitization, Category 1B
STOT RE 2	Specific target organ toxicity - repeated exposure, Category 2

Abbreviations

ADR - Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID - Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning theInternational Transport of Dangerous Goods by Rail)
IMDG - International Maritime Code for Dangerous Goods
IATA - International Air Transport Association
IATA-DGR - Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO-TI - Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS - Globally Harmonized System of Classification and Labelling of Chemicals
EINECS - European Inventory of Existing Commercial Chemical Substances
CAS - Chemical Abstracts Service (division of the American Chemical Society)
GefStoffV - Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL - Lowest Observed Adverse Effect Level
LOEL - Lowest Observed Effect Level

NOAEL - No Observed Adverse Effect Level
NOEC - No Observed Effect Concentration
NOEL - No Observed Effect Level
OECD - Organisation for Econpmic Cooperation and Development
VOC - Volatile Organic Compounds
Changes since the last version are highlighted in the margin (***). This version replaces all previous versions.
This safety datasheet only contains information relating to safety and does not replace any product information or product specification.
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.
The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.

Annex to the extended Safety Data Sheet (eSDS)

Short title of the exposure scenario

ES013 - Industrial applications: rolling, dipping, pouring and other processing without aerosol formation (inside)

Use of the substance/preparation

Surface treatment of wood and other materials

Use

SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
PROCh01	Other processing without aerosol formation
PROCh02	roller coating industrial
PROC13	Treatment of articles by dipping and pouring

Contributing exposure scenario controlling environmental exposure

Use

ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix

Physical form liquid

Maximum amount used per time or activity

Emission days per site: <= 300

Other relevant operational conditions

Use: Room temperature
Drying and through-curing takes place at ambient temperature or at higher temperatures.
Curing takes place through UV light exposure.
Where possible recycling is preferred to disposal or incineration.
Do not allow to enter soil, waterways or waste water canal.
Dispose of rinse water in accordance with local and national regulations.

Waste water

Do not discharge into the drains/surface waters/groundwater.

Exhaust air

Keep container closed. Avoid release to the environment.

Soil

Floors should be impervious, resistant to liquids and easy to clean.

Disposal recommendations for the product

EWC waste code	080111 - waste paint and varnish containing organic solvents or other dangerous substances 200127 - paint, inks, adhesives and resins containing dangerous substances

Where possible recycling is preferred to disposal or incineration.
Do not allow to enter drains or waterways.

modified product

EWC waste code	080113 - sludges from paint or varnish containing organic solvents or other dangerous substances 080115 - aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances

Dried residues

EWC waste code	080112 - waste lacquers and waste paint except those falling under 080111

Disposal recommendations for packaging

EWC waste code	150110 - packaging containing residues of or contaminated by dangerous substances

Fully drained containers which are drop- and scrape-free can be treated as industrial waste, and can possibly be recycled.

Contributing exposure scenario controlling worker exposure

Use

SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
PROCh01	Other processing without aerosol formation
PROCh02	roller coating industrial

Physical form liquid

Maximum amount used per time or activity

Duration of exposure	<=	8	h/d
Frequency of exposure	<=	220	d/a

Other relevant operational conditions

Use: Room temperature
Drying and through-curing takes place at ambient temperature or at higher temperatures.
Curing takes place through UV light exposure.
Read attached instructions before use.

Product substance and product safety related measures

Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide for sufficient ventilation. This can be achieved by local exhaust or general exhaust air collection. Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values.

Hand protection

Protective gloves complying with EN 374.
Glove material
Multilayer gloves made from

Appropriate Material	Fluorinated rubber / butyl-rubber	
Material thickness	>=	0,7
Breakthrough time	>=	30

This recommendation is valid only for the product named in this safety data sheet supplied by us, and only for the indicated intended use purposes.
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
The breakthrough time must be greater than the end use time of the product.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

Eye protection

Wear eye glasses with side protection according to EN 166.

Body protection

Wear suitable protective clothing. Remove contaminated clothing and wash it before reuse. Wash hands before breaks and after work.

Exposure estimation and reference to its source

Workers (industrial)

PROC	PROC7
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	5,057 mg/m³
Exposure assessment (method)	qualitative assessment
Risk characterisation ratio (RCR)	0,207
Lead substance	oxybis(methyl-2,1-ethanediyl) diacrylate

Workers (industrial)

PROC	PROC10
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	10,113 mg/m³
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,413
Lead substance	oxybis(methyl-2,1-ethanediyl) diacrylate

Workers (industrial)

PROC	PROCh02
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	10,113 mg/m³
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,413
Lead substance	oxybis(methyl-2,1-ethanediyl) diacrylate

Workers (industrial)

PROC	PROC13

Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	10,113 mg/m³
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,413
Lead substance	oxybis(methyl-2,1-ethanediyl) diacrylate

Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	0,2 mg/m³
Exposure assessment (method)	Extended TRA workers (via Chesar 2.1)
Risk characterisation ratio (RCR)	0,714
Lead substance	benzophenone

Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	dermal, long-term - systemic Indoor use
Exposure assessment	0,043 mg/kg/d
Exposure assessment (method)	Extended TRA workers (via Chesar 2.1)
Risk characterisation ratio (RCR)	0,714
Lead substance	benzophenone

Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	0,5 mg/m³
Exposure assessment (method)	Extended TRA workers (via Chesar 2.1)
Risk characterisation ratio (RCR)	0,989
Lead substance	benzophenone

Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	dermal, long-term - systemic Indoor use
Exposure assessment	0,027 mg/kg/d
Exposure assessment (method)	Extended TRA workers (via Chesar 2.1)
Risk characterisation ratio (RCR)	0,989
Lead substance	benzophenone

Workers (industrial)

SU	SU3
PROC	PROC13
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	0,1 mg/m³
Exposure assessment (method)	Extended TRA workers (via Chesar 2.1)
Risk characterisation ratio (RCR)	0,829
Lead substance	benzophenone

Workers (industrial)

SU	SU3
PROC	PROC13
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,069 mg/kg/d
Exposure assessment (method)	Extended TRA workers (via Chesar 2.1)
Risk characterisation ratio (RCR)	0,829
Lead substance	benzophenone

Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,2143 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,1714
Lead substance	2-hydroxy-2-methylpropiophenone

Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	inhalation, long-term - systemic
	Indoor use
Exposure assessment	1,026 mg/m³
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,2932
Lead substance	2-hydroxy-2-methylpropiophenone

Workers (industrial)

SU	SU3
PROC	PROC13
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,686 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,0549
Lead substance	2-hydroxy-2-methylpropiophenone

Workers (industrial)

SU	SU3
PROC	PROC13
Assessment method	inhalation, long-term - systemic
	Indoor use
Exposure assessment	2,395 mg/m³
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,6842
Lead substance	2-hydroxy-2-methylpropiophenone

Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,0686 mg/kg/d

Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,0549
Lead substance	2-hydroxy-2-methylpropiophenone

Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	2,395 mg/m³
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,6842
Lead substance	2-hydroxy-2-methylpropiophenone
SU	SU3
PROC	PROC7
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	10,04 mg/m³
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,427
Lead substance	tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine
SU	SU3
PROC	PROC7
Assessment method	dermal, long-term - systemic Indoor use
Exposure assessment	1,29 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,386
Lead substance	tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine
SU	SU3
PROC	PROC10
Assessment method	inhalation, long-term - systemic Indoor use
Exposure assessment	6,69 mg/m³
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,285
Lead substance	tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine
SU	SU3
PROC	PROC10
Assessment method	dermal, long-term - systemic Indoor use
Exposure assessment	0,82 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,247
Lead substance	tripropylene glycole, ester with acrylic acid, reactionproduct with diethyle amine

Information on estimated exposure and downstream-user guidance

Guidance for Downstream Users

The downstream user can evaluate whether he operates within the conditions set in the exposure

scenario on the basis of the information supplied. This evaluation can be conducted by an expert or using the risk assessment tools recommended by ECHA.