

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.07.2021

Version number 6

Revision: 09.07.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**Trade name: **Technovit 4002 IQ liquid****1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

Application of the substance / the mixture Resin for metallographic testing

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

Kulzer GmbH

Leipziger Straße 2, 63450 Hanau (Germany)

Tel.: +49 (0)6181 9689-2570 (Wehrheim)

Informing department: email: technik.wehrheim@kulzer-dental.com**1.4 Emergency telephone number: Emergency CONTACT (24-Hour-Number): +49 (0)6132-84463****SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 2 H361d Suspected of damaging the unborn child.

STOT RE 1 H372 Causes damage to the hearing organs through prolonged or repeated exposure.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02 GHS07 GHS08

Signal word Danger**Hazard-determining components of labelling:**

Styrol

methyl methacrylate

N,N-dimethyl-p-toluidine

2-(2-methoxyethoxy)ethanol

Hazard statements

H225 Highly flammable liquid and vapour.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

H372 Causes damage to the hearing organs through prolonged or repeated exposure.

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Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P370+P378 In case of fire: Use for extinction: CO₂, sand, extinguishing powder.

P403+P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards -
Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients
3.2 Chemical characterisation: Mixtures

· **Description:** -

Dangerous components:

CAS: 100-42-5 EINECS: 202-851-5	styrene Flam. Liq. 3, H226 Repr. 2, H361d; STOT RE 1, H372 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	≥35-≤40%
CAS: 80-62-6 EINECS: 201-297-1 Reg.nr.: 01-2119452498-28-xxxx	methyl methacrylate Flam. Liq. 2, H225 Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	≥15-<20%
CAS: 2082-81-7 EINECS: 218-218-1 Reg.nr.: 01-2119967415-30-xxxx	1,4-butandioldimethacrylate Skin Sens. 1B, H317	≥1-≤5%
CAS: 99-97-8 EINECS: 202-805-4	N,N-dimethyl-p-toluidine Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT RE 2, H373 Aquatic Chronic 3, H412	≥0-<1%
CAS: 111-77-3 EINECS: 203-906-6	2-(2-methoxyethoxy)ethanol Repr. 2, H361d	≥0-<1%
CAS: 123-31-9 EINECS: 204-617-8	1,4-dihydroxybenzene Muta. 2, H341; Carc. 2, H351 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Acute Tox. 4, H302; Skin Sens. 1, H317	<0.1%

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures
4.1 Description of first aid measures
General information

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Personal protection for the First Aider.

Take affected persons out of danger area and instruct to lie down.

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- Instantly remove any clothing soiled by the product.
- **After inhalation**
 In case of unconsciousness bring patient into stable side position for transport.
 Supply fresh air or oxygen; call for doctor.
- **After skin contact**
 Wash with polyethylene glycol 400 and then rinse with copious amounts of water.
 If skin irritation or rash occurs: Get medical advice/attention.
- **After eye contact**
 Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
 Remove contact lenses, if present and easy to do. Continue rinsing.
- **After swallowing**
 Rinse out mouth and then drink plenty of water.
 Do not induce vomiting; instantly call for medical help.
- **4.2 Most important symptoms and effects, both acute and delayed Allergic reactions**
- **4.3 Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
 - **Suitable extinguishing agents** CO₂, sand, extinguishing powder. Do not use water.
 - **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**
 Can form explosive gas-air mixtures.
 Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
 - **Protective equipment:**
 Wear self-contained breathing apparatus.
 (EN 133)
 - **Additional information**
 Collect contaminated fire fighting water separately. It must not enter drains.
 Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 Wear protective equipment. Keep unprotected persons away.
 Ensure adequate ventilation
 Avoid contact with eyes and skin.
 Do not breathe vapor / mist / gas.
 Keep away from ignition sources
 Use breathing protection against the effects of fumes/dust/aerosol.
 Wear protective clothing.
- **6.2 Environmental precautions:**
 Do not allow to enter drainage system, surface or ground water.
 Damp down gases/fumes/haze with water spray jet.
 Inform respective authorities in case product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
 Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).
 Ensure adequate ventilation.
 Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**
 See Section 7 for information on safe handling

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See Section 8 for information on personal protection equipment.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Keep containers tightly sealed.
- Avoid contact with eyes and skin.
- Do not breathe vapor / mist / gas.
- Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- Keep away from heat and direct sunlight.
- Open and handle container with care.
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.

Handling

- do not mix with
- Radical initiator
- organic peroxides
- reducing agent

Information about protection against explosions and fires:

- Fumes can combine with air to form an explosive mixture.
- Use explosion-proof apparatus / fittings and spark-proof tools.
- Do not spray on flames or red-hot objects.
- Use only in explosion-proof area.
- Keep ignition sources away - Do not smoke.
- Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

- Store only in the original container.
- Store in cool, dry place in tightly closed containers.
- Protect from the effects of light.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

- Keep receptacle tightly sealed.
- Store cool (not above 25 °C).
- Protect from heat and direct sunlight.

Recommended storage temperature: 15 - 21 °C

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Additional information about design of technical systems: No further data; see item 7.**

Components with critical values that require monitoring at the workplace:

100-42-5 styrene

WEL (Great Britain)	Short-term value: 1080 mg/m ³ , 250 ppm Long-term value: 430 mg/m ³ , 100 ppm
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80-62-6 methyl methacrylate

WEL (Great Britain)	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm
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IOELV (European Union)		Short-term value: 100 ppm Long-term value: 50 ppm
111-77-3 2-(2-methoxyethoxy)ethanol		
WEL (Great Britain)		Long-term value: 50.1 mg/m ³ , 10 ppm Sk
IOELV (European Union)		Long-term value: 50.1 mg/m ³ , 10 ppm Skin
123-31-9 1,4-dihydroxybenzene		
WEL (Great Britain)		Long-term value: 0.5 mg/m ³
· DNELs		
100-42-5 styrene		
Oral	ge.pop., l.te, syst.	2.1 mg/Kg (nd)
Dermal	worker industr., l.te., syst.	406 mg/Kg/d (nd)
	ge.pop., l.te, syst.	343 mg/Kg/d (nd)
Inhalative	worker industr., acute, syst.	289 mg/m ³ (nd)
	worker industr., l.te., syst.	85 mg/m ³ (nd)
	worker industr., l.te., local	306 mg/m ³ (nd)
	ge.pop., acu., syst.	174.25 mg/m ³ (nd)
	ge.pop., l.te, syst.	10.2 mg/m ³ (nd)
	ge.pop., l.te, local	182.75 mg/m ³ (nd)
80-62-6 methyl methacrylate		
Oral	ge.pop., l.te, syst.	8.2 mg/Kg (nd)
Dermal	worker industr., l.te., syst.	13.67 mg/Kg/d (nd)
	ge.pop., l.te, syst.	8.2 mg/Kg/d (nd)
Inhalative	worker industr., acute, local	416 mg/m ³ (nd)
	worker industr., l.te., syst.	348.4 mg/m ³ (nd)
	worker industr., l.te., local	208 mg/m ³ (nd)
	ge.pop., acu., local	208 mg/m ³ (nd)
	ge.pop., l.te, syst.	74.3 mg/m ³ (nd)
2082-81-7 1,4-butandiol dimethacrylate		
Oral	ge.pop., l.te, syst.	2.5 mg/Kg (nd)
Dermal	worker industr., l.te., syst.	4.2 mg/Kg/d (nd)
	ge.pop., l.te, syst.	2.5 mg/Kg/d (nd)
Inhalative	worker profess., l.te., syst.	14.5 mg/m ³ (nd)
	ge.pop., l.te, syst.	4.3 mg/m ³ (nd)
99-97-8 N,N-dimethyl-p-toluidine		
Oral	ge.pop., l.te, syst.	2.373 mg/Kg (nd)
Dermal	worker industr., l.te., syst.	1.186 mg/Kg/d (nd)
	ge.pop., l.te, syst.	0.293 mg/Kg/d (nd)
Inhalative	worker industr., l.te., syst.	1.352 mg/m ³ (nd)
	ge.pop., l.te, syst.	0.336 mg/m ³ (nd)
111-77-3 2-(2-methoxyethoxy)ethanol		
Oral	ge.pop., l.te, syst.	7.5 mg/Kg (nd)
Dermal	worker industr., l.te., syst.	2.22 mg/Kg/d (nd)

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Inhalative	ge.pop., l.te, syst.	1.33 mg/Kg/d (nd)
	worker industr., l.te., syst.	50.1 mg/m ³ (nd)
	ge.pop., l.te, syst.	30.1 mg/m ³ (nd)
123-31-9 1,4-dihydrxybenzene		
Oral	ge.pop., l.te, syst.	0.6 mg/Kg (nd)
Dermal	worker industr., l.te., syst.	3.33 mg/Kg/d (nd)
	ge.pop., l.te, syst.	1.66 mg/Kg/d (nd)
Inhalative	worker industr., l.te., syst.	2.1 mg/m ³ (nd)
	ge.pop., l.te, syst.	1.05 mg/m ³ (nd)
· PNECs		
100-42-5 styrene		
freshwater	0.028 mg/l (nd)	
marine water	0.014 mg/l (nd)	
STP	5 mg/l (nd)	
sedim., dw, fre.wat.	0.614 mg/Kg (nd)	
sedim., dw, mar.wat.	0.307 mg/Kg (nd)	
soil,dw	0.2 mg/Kg (nd)	
80-62-6 methyl methacrylate		
freshwater	0.94 mg/l (aqua)	
	0.94 mg/l (nd)	
marine water	0.094 mg/l (nd)	
STP	10 mg/l (nd)	
sedim., dw, fre.wat.	10.2 mg/Kg (nd)	
sedim., dw, mar.wat.	0.102 mg/Kg (nd)	
soil,dw	1.48 mg/Kg (nd)	
2082-81-7 1,4-butandioldimethacrylate		
freshwater	0.043 mg/l (nd)	
marine water	0.004 mg/l (nd)	
STP	2 mg/l (nd)	
sedim., dw, fre.wat.	3.12 mg/Kg (nd)	
sedim., dw, mar.wat.	0.312 mg/Kg (nd)	
soil,dw	0.573 mg/Kg (nd)	
99-97-8 N,N-dimethyl-p-toluidine		
freshwater	0.153 mg/l (nd)	
marine water	0.015 mg/l (nd)	
STP	4.286 mg/l (nd)	
sedim., dw, fre.wat.	45.378 mg/Kg (nd)	
sedim., dw, mar.wat.	45.378 mg/Kg (nd)	
soil,dw	18.677 mg/Kg (nd)	
111-77-3 2-(2-methoxyethoxy)ethanol		
freshwater	12 mg/l (nd)	
marine water	1.2 mg/l (nd)	
STP	10,000 mg/l (nd)	
sedim., dw, fre.wat.	44.4 mg/Kg (nd)	

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sedim., dw, mar.wat.	0.44 mg/Kg (nd)
soil,dw	2.1 mg/Kg (nd)
123-31-9 1,4-dihydroxybenzene	
freshwater	0.00057 mg/l (nd)
marine water	0.00057 mg/l (nd)
STP	0.71 mg/l (nd)
sedim., dw, fre.wat.	0.0049 mg/Kg (nd)
sedim., dw, mar.wat.	0.00049 mg/Kg (nd)
soil,dw	0.00064 mg/Kg (nd)

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Do not eat or drink while working.

The usual precautionary measures should be adhered to in handling the chemicals.

Do not inhale gases / fumes / aerosols.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

Use breathing protection in case of insufficient ventilation.

Filter A.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

chemical protection gloves are suitable, which are tested according to EN 374

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

If skin contact cannot be avoided, protective gloves are recommended to avoid possible sensitization.

Check protective gloves prior to each use for their proper condition.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** eye protection (EN 166)

· **Body protection:** Solvent resistant protective clothing

· **Limitation and supervision of exposure into the environment**

Do not allow to enter the ground/soil.

Do not allow to enter drainage system, surface or ground water.

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties	
· General Information	
· Appearance:	
· Form:	Fluid
· Colour:	Blue
· Smell:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
· Melting point/freezing point:	Not determined
· Initial boiling point and boiling range:	>100 °C
· Flash point:	15 °C
· Inflammability (solid, gaseous)	Not applicable.
· Ignition temperature:	430 °C
· Decomposition temperature:	Not determined.
· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures is possible.
· Critical values for explosion:	
· Lower:	Not determined.
· Upper:	Not determined.
· Steam pressure:	Not determined.
· Density	
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix
· Partition coefficient: n-octanol/water: Not determined.	
· Viscosity:	
· dynamic:	Not determined.
· kinematic:	Not determined.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity flammable**
- **10.2 Chemical stability**
 - **Conditions to be avoided:** No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Danger of polymerisation
- **10.4 Conditions to avoid** Heat, flames and sparks.
- **10.5 Incompatible materials:**
 - organic peroxides
 - Radical initiator
 - reducing agent

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- **10.6 Hazardous decomposition products:** None
- **Additional information:** -

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SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity**
 Harmful if inhaled.

- **LD/LC50 values that are relevant for classification:**

100-42-5 styrene

Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)
Inhalative	LC50/4 h	11.8 mg/l (rat)

80-62-6 methyl methacrylate

Oral	LD50	~7,900 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rab) (OECD 402)
Inhalative	LC50/4 h	29.8 mg/l (rat)

2082-81-7 1,4-butandiol dimethacrylate

Oral	LD50	10,066 mg/kg (rat) (OECD 401)
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99-97-8 N,N-dimethyl-p-toluidine

Oral	LD50	139 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/4 h	1.4 mg/l (rat)

111-77-3 2-(2-methoxyethoxy)ethanol

Oral	LD50	7,128 mg/kg (rat) (OECD 401)
Dermal	LD50	9,404 mg/kg (rabbit) (OECD 402)

123-31-9 1,4-dihydroxybenzene

Oral	LD50	>375 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rabbit) (OECD 402)

- **Primary irritant effect:**

- **Skin corrosion/irritation**
 Causes skin irritation.

- **Serious eye damage/irritation**
 Causes serious eye irritation.

- **Respiratory or skin sensitisation**
 May cause an allergic skin reaction.

- **Additional toxicological information:**

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
 Repr. 2

- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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

- **Reproductive toxicity**

Suspected of damaging the unborn child.

- **STOT-single exposure** Based on available data, the classification criteria are not met.

- **STOT-repeated exposure**

Causes damage to the hearing organs through prolonged or repeated exposure.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

100-42-5 styrene

EL50/48h	4.7 mg/L (daphnia) (OECD 202)
LC50/96h	10 mg/l (fish) (OECD 203)
ErC50 / 72 h	4.9 mg/l (algae) (EPA OTS 797.1050)
NOEC / 48h	1.9 mg/l (daphnia) (OECD 202)

80-62-6 methyl methacrylate

EC50/21d	49 mg/L (daphnia) (OECD 211)
EC50/48h	69 mg/l (daphnia) (EPA OTS 797.1300)
NOEC / 21d	37 mg/l (daphnia) (OECD 211)
ErC50 / 72 h	>110 mg/l (algae) (OECD 201)
NOEC / 72h	110 mg/l (algae) (OECD 201)
NOEC / 48h	48 mg/l (daphnia) (EPA OTS 797.1300)
EbC50 / 72h	>110 mg/l (algae) (OECD 201)
NOEC/ 35d	9.4 mg/L (fish) (OECD 210)
LC50/ 35d	33.7 mg/L (fish) (OECD 210)

2082-81-7 1,4-butandiol dimethacrylate

EC50/21d	14.1 mg/L (daphnia) (OECD 211)
EC50/48h	32.5 mg/l (fish)
NOEC / 21d	5.09 mg/l (daphnia) (OECD 211)
ErC50 / 72 h	9.79 mg/l (algae) (OECD 201)
NOEC / 72h	2.11 mg/l (algae) (OECD 201)
NOEC / 48h	25 mg/l (fish)
ErC10/72h	4.35 mg/L (algae) (OECD 201)

99-97-8 N,N-dimethyl-p-toluidine

EC50/72h	24.37 mg/l (algae) ((Q)SAR)
LC50/96h	46 mg/l (fish)
LC50/48h	15.259 mg/L (daphnia) ((Q)SAR)

111-77-3 2-(2-methoxyethoxy)ethanol

EC50/48h	1,192 mg/l (daphnia)
LC50/96h	5,741 mg/l (fish)
EC50/96h	>1,000 mg/L (algae) (OECD 201)

123-31-9 1,4-dihydroxybenzene

EC50/48h	0.134 mg/l (daphnia) (OECD 202)
LC50/96h	0.638 mg/l (fish) (OECD 203)
ErC50 / 72 h	0.33 mg/l (algae) (OECD 201)
NOEC / 48h	0.095 mg/l (daphnia) (OECD 202)

12.2 Persistence and degradability

100-42-5 styrene

Biodegradation	70.9-100 % /28d (nd)
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80-62-6 methyl methacrylate	
Biodegradation	94 % /14d (nd) (OECD 301C)
2082-81-7 1,4-butandiol dimethacrylate	
Biodegradation	84 % /28d (nd) (OECD 310)
99-97-8 N,N-dimethyl-p-toluidine	
Biodegradation	50 % /28d (nd)
111-77-3 2-(2-methoxyethoxy)ethanol	
Biodegradation	100 % /28d (nd) (OECD 301B; ISO/ 9439/ EEC 92/69/V, C.4-C)
123-31-9 1,4-dihydroxybenzene	
Biodegradation	70 % /14d (nd) (OECD 301C)
12.3 Bioaccumulative potential	
99-97-8 N,N-dimethyl-p-toluidine	
Bioconcentration factor (BCF)	33 (nd)

- **12.4 Mobility in soil** No further relevant information available.
 - **Additional ecological information:**
 - **General notes:**
 - Do not allow product to reach ground water, water bodies or sewage system.
 - Danger to drinking water if even small quantities leak into soil.
- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**
 - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
 - Disposal must be made according to official regulations.
 - **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---------------------------------------|---|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | UN1866 |
| · 14.2 UN proper shipping name | |
| · ADR | 1866 RESIN SOLUTION, special provision 640D |
| · IMDG, IATA | RESIN SOLUTION |

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14.3 Transport hazard class(es)

ADR



· Class 3 (F1) Flammable liquids.
· Label 3

IMDG, IATA



· Class 3 Flammable liquids.
· Label 3

14.4 Packing group

· ADR, IMDG, IATA II

14.5 Environmental hazards:

· Marine pollutant: No

14.6 Special precautions for user

Warning: Flammable liquids.

· Kehler Number: 33
· EMS Number: F-E, S-E
· Stowage Category: B

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

Not applicable.

Transport/Additional information: -

ADR

· Limited quantities (LQ) 5L
· Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
· Transport category 2
· Tunnel restriction code D/E

IMDG

· Limited quantities (LQ) 5L
· Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation":

UN 1866 RESIN SOLUTION, SPECIAL PROVISION 640D, 3, II

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **Directive 2012/18/EU**
 - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
 - **Seveso category P5c** FLAMMABLE LIQUIDS
 - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
 - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
 - **Information about limitation of use:**
 - Employment restrictions concerning young persons must be observed.
 - Employment restrictions concerning pregnant and lactating women must be observed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.
- H361d Suspected of damaging the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 3: Acute toxicity – Category 3
 Acute Tox. 4: Acute toxicity – Category 4

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Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
Muta. 2: Germ cell mutagenicity – Category 2
Carc. 2: Carcinogenicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Sources

(EC) 1272/2008: classification, labelling and packaging of substances and mixtures

(EC) 1907/2006: REACH

ADR/RID/ADN - IDMG - IATA: transport of dangerous goods by road, rail, inland waterway, with maritime vessels and for the air transport

· * **Data compared to the previous version altered.**

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