

# Safety data sheet

# Siegelharz

Uniprox Safety data sheet in accordance with regulation (EC) 1907/2006

Product: Siegelharz (MG114) Date/ Revised: 11.10.2021

Document No.: MG114 Siegelharz 006 EN

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#### Substance/preparation and company identification 1.

Trade name: Siegelharz

Application of the substance/ the preparation: Resin for orthopaedic technology

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#### **Hazard identification** 2.

# 2.1. Classification of the substance or mixture

The product has been classified according to the legislation in force.

# Classification according to Regulation (EC) No 1272/2008 as amended

**Physical Hazards** 

Flammable liquids Category 2 H225 Highly flammable liquid and

vapor.

**Health Hazards** 

Caustic burning / irritation of skin Category 2 H315 Causes skin irritation.

Skin Sensitisation Category 1 H317 May cause an allergic skin

reaction.

Specific Target Organ Toxicity

-single exposure

(Respiratory system) Category 3 May cause respiratory H335

irritation.

2.2. Label elements

**Contains** methyl methacrylate; CAS-No.: 80-62-6

triethyleneglycol dimethacrylate; CAS-No.: 109-16-0

ethylene di(S-thioacetate); CAS-No.: 123-81-9

Signal word (s) Danger

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## **GHS** pictogram



**Hazard Statement(s)** H225 - Highly flammable liquid and vapour.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H335 - May cause respiratory irritation.

**Precautionary Statements Prevention:** 

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

P233 - Keep container tightly closed.

P261 - Avoid breathing dust/fume/gas/mist/vapours/

P262 - Do not get in eyes, on skin, or on clothing.

P272 - Contaminated work clothing should not be allowed out of the workplace.

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

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P370+P378: In case of fire, use recommended extinguishing media for extinction.

# 2.3. Other hazards

**Response:** 

Take precautionary measures against static discharges. Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/ or heavy metal ions.

#### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. **Endocrine disrupting properties-Toxicity** 

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### **Endocrine disrupting properties-Ecotoxicity**

This substance/mixture contains components considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.

#### 3. Composition/Information on Ingredients

3.2. Mixtures



**General information:** preparation

General information.	preparation			
Chemical name	CAS-No.	Concentration	M-Factor	Notes
	EC-No.			
	REACH-No.			
methyl methacrylate	80-62-6	50 - 70 %	No data available	#
	201-297-1			
	01-2119452498-28			
triethyleneglycol	109-16 -0	1 – 10 %	No data available	
dimethacrylate	203-652-6			
•	01-2119969287-21			
N,N-bis-(2-hydroxypropyl)-p-	38668-48-3	0.25 – < 1 %	No data available	
toluidine	254-075-1			
	01-2119980937-17			
ethylene di (S- thioacetate)	123-81 -9	0,1 – 0,25 %	No data available	
	204-653-4			
	01-2120775150-61			
tris(nonylphenyl) phosphite	26523-78-4	0.1 - 0.25 %	No data available	
	247-759-6			
	01-2119520601-54			
n-butyl acrylate	141-32 -2	0.1 – 0,25 %	No data available	#
	205-480-7			
	01-2119453155-43			

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# Classification

Chemical name	Classification	Notes
methyl methacrylate	Classification: Flam. Liq.: 2: H225; Skin Irrit.: 2: H315;	Note D
	Skin Sens.: 1B: H317; STOT SE: 3: H335;	
	Supplemental label information: None known.	
	Specific concentration limit: Specific target organ toxicity -	
	single exposure Category 3, >= 10 %;	
	Acute toxicity, oral: LD 50: > 5,000 mg/kg	
	Acute toxicity, inhalation: LC 50: 29.8 mg/l	
	Acute toxicity, dermal: LD 50: > 5,000 mg/kg	
triethyleneglycol	Classification: Skin Sens.: 1B: H317;	Note D
dimethacrylate	Supplemental label information: None known.	
	Specific concentration limit: None known.	
	Acute toxicity, oral: LD 50: > 5,000 mg/kg	
	Acute toxicity, inhalation: None known.	
	Acute toxicity, dermal: LD 50: > 2,000 mg/kg	
N,N-bis-(2-hydroxypropyl)-p-	Classification: Acute Tox.: 2: H300; Eye Irrit.: 2: H319;	No data
toluidine	Aquatic Chronic: 3: H412;	available
	Supplemental label information: None known.	
	Specific concentration limit: None known.	
	Acute toxicity, oral: LD 50: 25 mg/kg	
	Acute toxicity, inhalation: None known.	
	Acute toxicity, dermal: LD 50: > 2,000 mg/kg	
ethylene di (S- thioacetate)	Classification: Acute Tox.: 4: H302; Acute Tox.: 4: H332;	No data
-	Acute Tox.: 4: H332; Eye Irrit.: 2: H319; Skin Sens.: 1A:	available
	H317; STOT SE: 3: H335;	
	Supplemental label information: None known.	
	Specific concentration limit: None known.	
	Acute toxicity, oral: LD 50: 303 mg/kg	
	Acute toxicity, inhalation: LC 50: 1.5 mg/l	
	Acute toxicity, dermal: LD 50: > 2,000 mg/kg	
tris(nonylphenyl) phosphite	Classification: Skin Sens.: 1: H317; Aquatic Acute: 1:	No data
	H400; Aquatic Chronic: 1: H410;	available
	Supplemental label information: None known.	
	Specific concentration limit: None known.	
	Acute toxicity, oral: LD 50: > 16,200 mg/kg	

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<sup>#</sup> This substance has workplace exposure limit(s).

<sup>##</sup> This substance is listed as SVHC



	Acute toxicity, inhalation: None known. Acute toxicity, dermal: LD 50: > 2,000 mg/kg	
n-butyl acrylate	Classification: Flam. Liq.: 3: H226; Acute Tox.: 4: H332; Skin Irrit.: 2: H315; Eye Irrit.: 2: H319; Skin Sens.: 1B: H317; STOT SE: 3: H335; Aquatic Chronic: 3: H412; Supplemental label information: None known. Specific concentration limit: None known. Acute toxicity, oral: LD 50: 3,150 mg/kg Acute toxicity, inhalation: LC 50: 10.3 mg/l Acute toxicity, dermal: LD 50: > 2,000 mg/kg	Note D

CLP: Regulation No. 1272/2008.

The full text for all H-statements is displayed in section 16.

# **Endokrine disrupting properties-Ecotoxicity**

tris(nonylphenyl) phosphite	The substance is considered to have endocrine disrupting
	properties according to REACH Article 57(f) for the
	environment.

# 4. First-aid measures

General Medical treatment is necessary if symptoms occur

which are obviously caused by skin or eye contact with the product or by inhalation of its vapours. Take off all

contaminated clothing immediately.

4.1. Description of first aid measures

Inhalation Move subject to fresh air and keep him calm.

See a physician.

Skin contact Wash off immediately with soap and water. If skin

irritation occurs consult a physician.

Eye contact Keeping the eyelids apart flush thoroughly with water

immediately. If irritation persists, contact a physician.

Ingestion Do not induce vomiting. Consult a physician

immediately.

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

**d delayed** Skin Sensitisation, Causes skin and eye irritation.

Excessive or prolonged exposure can cause the

following: Headache, confusion

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

**Hazards** No data available

**Treatment** No

# 5. Fire-fighting measures General Fire Hazards

Vapours are heavier than air and can form an explosive mixture with air. Flammable liquid. Vapours can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Remove all sources of ignition. Also keep emptied containers away from sources of heat and ignition. Keep out unprotected persons. In case of fire, remove the endangered barrels and bring to a safe place, if this can be done safely. Containers exposed to heat (fire) may build up pressure. Cool by splashing with water. Prevent fire extinguishing water from contaminating surface water or the ground water

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system. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.1. Extinguishing media Suitable extinguishing media Unsuitable extinguishing media 5.2. Special hazards arising from the substance or mixture

foam, dry chemical, carbon dioxide high volume water jet

5.3. Advice for firefighters **Special firefighting procedures** 

May be released in case of fire: carbon monoxide, carbon dioxide, organic products of decomposition.

Keep away from sources of ignition - No smoking. Vapors are heavier than air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Take action to prevent static discharges. Use explosion-proof equipment. In the event of fire, cool the endangered containers with water. Firefighting must be carried out from a safe distance.

**Special protective equipment** for fire-fighters

Wear self-contained breathing apparatus.

#### 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Assure sufficient ventilation. Keep away sources of ignition. Use personal protective clothing. Use

breathing apparatus if exposed to vapours/dust/mist/aerosol.

**6.1.1** For non-emergency personnel **6.1.2** For emergency responders

No data available. No data available.

**6.2.** Environmental precautions

Prevent product from getting into drains/surface water/groundwater.

6.3. Methods and material for containment and cleaning up

Remove all sources of ignition. As sure sufficient ventilation. Larger quantities: Remove mechanically (by pumping). Use explosion-proof equipment! Smaller quantities and/or residues: Contain with absorbent material (e.g. sand, diatomaceous earth, acid absorbent, universal absorbent or sawdust). Dispose of in

accordance with regulations.

6.4. Reference to other sections

For personal protection see section 8. For disposal considerations see section 13.

#### 7. Handling and storage

# 7.1. Precautions for safe handling

Do not breathe vapors. Avoid contact with skin and eyes. Wash hands before breaks and immediately after handling the product. Safety shower and eye wash fountain should be available. Keep away from sources

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of ignition - No smoking. Vapors are heavier than air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Take action to prevent static discharges. Use explosionproof equipment. In the event of fire, cool the endangered containers with water. Firefighting must be carried out from a safe distance. When using do not eat, drink or smoke. Remove contaminated clothing and wash it before reuse. Avoid inhalation, ingestion and contact with skin and eyes. Provide sufficient ventilation and exhaust at the workplace. Provide good room ventilation even at ground level (vapours are heavier than air). Keep container tightly closed. Open drum carefully as content may be under pressure. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Wash thoroughly after handling.

# 7.2. Conditions for safe storage, including any incompatibilities

Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat. Protect from the action of light. Keep containers tightly closed in a cool, well - ventilated place. Fill the container by approximately 90 % only as oxygen (air) is required for stabilisation. With large storage containers make sure the oxygen(air) supply is sufficient to ensure stability. Keep only in the original container at a temperature not exceeding 25 °C.

#### 7.3. Specific end use(s)

No data available.

# 8. Exposure Controls/Personal Protection

# 8.1. Control parameters

# **Occupational Exposure Limits**

Chemical name	Type	<b>Exposure Limit</b>	Source
		Values	
Methyl methacrylate	TWA	50 ppm 208 mg/m <sup>3</sup>	UK. EH40 Workplace Exposure Limits
			(WELs) (12 2011)
	STEL	100 ppm 416 mg/m <sup>3</sup>	UK. EH40 Workplace Exposure Limits
	15 minutes		(WELs) (12 2011)
	TWA	50 ppm	EU. Indicative Exposure Limit Values in
			Directives 91/322/EEC, 2000/39/EC,
			2006/15/EC, 2009/161/EU, 2017/164/EU
			(02 2017)
	STEL	100 ppm	EU. Indicative Exposure Limit Values in
			Directives 91/322/EEC, 2000/39/EC,
			2006/15/EC, 2009/161/EU, 2017/164/EU
			(02 2017)
n-butyl acrylate	TWA	1 ppm 5 mg/m <sup>3</sup>	UK. EH40 Workplace Exposure Limits
			(WELs) (12 2011)
	STEL	5 ppm 26 mg/m <sup>3</sup>	UK. EH40 Workplace Exposure Limits
	15 minutes		(WELs) (12 2011)
	TWA	2 ppm 11 mg/m <sup>3</sup>	EU. Indicative Exposure Limit Values in
			Directives 91/322/EEC, 2000/39/EC,
			2006/15/EC, 2009/161/EU, 2017/164/EU
			(12 2009)

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STEL	10 ppm 53 mg/m <sup>3</sup>	EU. Indicative Exposure Limit Values in
		Directives 91/322/EEC, 2000/39/EC,
		2006/15/EC, 2009/161/EU, 2017/164/EU
		(12 2009)

**Exposure guidelines** 

Chemical name	Type	Source
Methyl methacrylate	Time Weighted Average (TWA): Indicative	EU. Indicative Occupational Exposure
		Limit Values in Directives
		91/322/EEC, 2000/39/EC,
		2006/15/EC, 2009/161/EU,
		2017/164/EU, as amended
	Short Term Exposure Limit (STEL):	EU. Indicative Occupational Exposure
	Indicative	Limit Values in Directives
		91/322/EEC, 2000/39/EC,
		2006/15/EC, 2009/161/EU,
		2017/164/EU, as amended
n-butyl acrylate	Time Weighted Average (TWA): Indicative	EU. Indicative Occupational Exposure
		Limit Values in Directives
		91/322/EEC, 2000/39/EC,
		2006/15/EC, 2009/161/EU,
		2017/164/EU, as amended
	Short Term Exposure Limit (STEL):	EU. Indicative Occupational Exposure
	Indicative	Limit Values in Directives
		91/322/EEC, 2000/39/EC,
		2006/15/EC, 2009/161/EU,
		2017/164/EU, as amended

# **Biological Limit Values**

No biological exposure limits noted for the ingredient(s).

# **DNEL-Values**

Remarks: DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
Methyl	Workers	Inhalation	Local, long-term; 208	Repeated dose
methacrylate			mg/m³	toxicity
	General	Inhalation	Local, long-term; 104	Repeated dose
	population		mg/m³	toxicity
	Workers	Dermal	Local, long-term; 1.5 mg/cm <sup>2</sup>	Skin sensitization
	General population	Dermal	Local, long-term; 1.5 mg/cm <sup>2</sup>	Skin sensitization
	General	Inhalation	Local, short-term;	Repeated dose
	population		208 mg/m <sup>3</sup>	toxicity
	Workers	Eyes	Local effects;	No hazard identified
	General	Eyes	Local effects;	No hazard identified
	population General	Oral	St: 1t	D
		Orai	Systemic, long-term;	Repeated dose
	population	T 1 1 1	8.2 mg/kg	toxicity
	Workers	Inhalation	Local, short-term;	Repeated dose
			416 mg/m <sup>3</sup>	toxicity
	Workers	Dermal	Systemic, long-term;	Repeated dose
			13.67 mg/kg	toxicity
	General	Dermal	Systemic, long-term;	Repeated dose
	population		8.2 mg/kg	toxicity
	Workers	Inhalation	Systemic, long-term;	Repeated dose
			348.4 mg/m <sup>3</sup>	toxicity
	General	Dermal	Local, short-term; 1.5	Skin sensitization
	population		mg/cm <sup>2</sup>	
	General	Inhalation	Systemic, long-term;	Repeated dose
	population		74.3 mg/m <sup>3</sup>	toxicity

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	Workers	Dermal	Local, short-term; 1.5 mg/cm <sup>2</sup>	Skin sensitization
triethyleneglycol dimethacrylate	Workers	Dermal	Systemic, long-term; 13.9 mg/kg	Repeated dose toxicity
difficultactylate	General	Inhalation	Systemic, long-term;	Repeated dose
	population	Imalacion	14.5 mg/m <sup>3</sup>	toxicity
	General	Oral	Systemic, long-term;	Repeated dose
	population	D 1	8.33 mg/kg	toxicity
	General population	Dermal	Systemic, long-term; 8.33 mg/kg	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 48.5 mg/m <sup>3</sup>	Repeated dose toxicity
	General population	Eyes	Local effects;	No hazard identified
	Workers	Eyes	Local effects;	No hazard identified
N,N-bis-(2- hydroxypropyl)-p- toluidine	Workers	Inhalation	Systemic, long-term; 2.47 mg/m <sup>3</sup>	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 0.25 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, long-term;	Repeated dose
			0.7 mg/kg	toxicity
	General population	Eyes	Local effects;	No hazard identified
	Workers	Eyes	Local effects;	Low hazard (no threshold derived).
ethylene di(S- thioacetate)	Workers	Dermal	Systemic, long-term; 0.14 mg/kg	Repeated dose toxicity
, , , , , , , , , , , , , , , , , , , ,	Workers	Eyes	Local effects;	
	General	Dermal	Systemic, long-term;	Repeated dose
	population General	Inhalation	0.05 mg/kg Systemic, long-term;	toxicity  Repeated dose
	population		0.05 mg/kg	toxicity
	General population	Eyes	Local effects;	
	Workers	Inhalation	Systemic, long-term; 0.49 mg/m <sup>3</sup>	Repeated dose toxicity
	General population	Inhalation	Systemic, long-term; 0.074 mg/m <sup>3</sup>	Repeated dose toxicity
	рориганоп		0.074 Hig/III	toxicity
tris(nonylphenyl)	General	Inhalati	Cristomi - 1 t	Damastad d
phosphite	population	Inhalation	Systemic, long-term; 11,8 mg/m <sup>3</sup>	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 23,6 mg/m <sup>3</sup>	Repeated dose toxicity
	Workers	Eyes	Local effects;	Low hazard (no threshold derived).
	Workers	Dermal	Systemic, long-term; 16,7 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term;	Repeated dose
	General	Eyes	8,35 mg/kg Local effects;	toxicity  Low hazard (no
	population General	Oral	Systemic, long-term;	threshold derived).  Repeated dose
	population	Orai	1,67 mg/kg	toxicity



n-butyl acrylate	Workers	Inhalation	Local, long-term; 11 mg/m <sup>3</sup>	irritation respiratory tract
	General population	Eyes	Local effects;	No hazard identified
	Workers	Eyes	Local effects;	Medium hazard (no threshold derived).

**PNEC-Values** 

Remarks: PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
Methyl methacrylate	marine water	0.094 mg/l	
11100111111111111111111111111111111111	marine water sediment	0.102 mg/kg	
	Sewage treatment plant	10 mg/l	
	freshwater sediment	10.2 mg/kg	
	Soil	1.48 mg/kg	
	freshwater	0.94 mg/l	
	Trestiviates	017 1 mg/1	<b>_</b>
triethyleneglycol dimethacrylate	freshwater	0.016 mg/l	
areany remegry cor announcer; race	marine water	0.002 mg/l	
	freshwater sediment	0.185 mg/kg	
	marine water sediment	0.103 mg/kg 0.018 mg/kg	
	Soil	0.027 mg/kg	
	Sewage treatment plant	1.7 mg/l	
	22 age weather plant		I
N,N-bis-(2-hydroxypropyl)-p-toluidine	Soil	0.023 mg/kg	
	marine water	0.002 mg/l	
	Sewage treatment plant	199.5 mg/l	
	marine water sediment	0.016 mg/kg	
	freshwater sediment	0.163 mg/kg	
	freshwater	0.017 mg/l	
	•		
ethylene di(S-thioacetate)	freshwater	4.8 μg/l	
		1 10	<u> </u>
tris(nonylphenyl) phosphite	Predator	37 mg/kg	Oral
	marine water	50 μg/l	
	marine water sediment	0.15 mg/kg	
	freshwater sediment	0.15 mg/kg	
	Sewage treatment plant	1.8 mg/l	
	freshwater	50 μg/l	
		1 5 5 178 5	<u> </u>
n-butyl acrylate	marine water	0 mg/l	
a and grand and a second	Sewage treatment plant	3.5 mg/l	
	Soil Soil	1 mg/kg	
	freshwater sediment	0.034 mg/kg	
	freshwater	0.003 mg/l	
	marine water sediment	0.003 mg/kg	

# **8.2.** Exposure controls

Appropriate Engineering Controls No data available

Individual protection measures, such as personal protective equipment

**Eye/face protection** tightly fitting goggles

Hand Protection

Material: butyl rubber gloves
Break-through time: 60 min
Glove thickness: 0.7 mm

Guideline: EN 374

Additional Information: Gloves should be replaced regularly, especially after extended contact with the

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product. For each workplace a suitable glove type has

to be selected.

**Skin and Body Protection** On handling of larger quantities: face mask, chemical-

resistant boots and apron

**Respiratory Protection** Breathing apparatus in case of high concentrations

short term: filter appliance, filter A

**Hygiene measures** Store work clothing separately. Take off all

contaminated clothing immediately. Follow the usual good standards of occupational hygiene. After work-time and during work intervals the affected skin areas

must be thoroughly cleaned.

**Environmental Controls** No data available

# 9. Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

**Appearance** 

Physical state liquid
Form liquid
Colour colourless
Odour ester-like

Odor Threshold No data available pH Not applicable Freezing point Not available

Boiling Temperature ca.100 °C (1,013 hPa) Flash point 10 °C (methyl methacrylate)

Evaporation Rate No data available. Flammability (solid, gas) No data available.

Flammability Limit - Upper (%) 12.5 %(V) (methyl methacrylate)

Flammability Limit - Lower (%) 2.1 %(V) at 10,5°C (methyl methacrylate)

Vapor pressure approx. 40 hPa (20 °C)

Vapor density (air=1)  $> 1 (20 \, ^{\circ}\text{C})$ 

 $\begin{array}{ll} Density & approx. \ 1 \ g/cm^3 \ (20 \ ^{\circ}C) \\ Relative \ density & no \ data \ available \\ Water \ solubility & approx. \ 16 \ g/l \ (20 \ ^{\circ}C) \end{array}$ 

Other solubility not available
Partition coefficient n- octanol/water
Self-Ignition Temperature not available
not pyrophoric

Decomposition Temperature No decomposition if used as directed.

Viscosity, kinematic No data available Viscosity, dynamic approx. 320 m Pas

9.2. Other information

Explosive properties No data available. Oxidizing properties No data available.

Minimum ignition temperature 430 °C (methyl methacrylate)

### 10. Stability and reactivity

**10.1. Reactivity** No data available.

**10.2. Chemical stability** No decomposition if used as directed.

10.3. Possibility of hazardous

**reactions** Polymerization with heat evolution may occur in the

presence of radical forming substances (e.g. peroxides),

reducing substances, and/or heavy metal ions.

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**10.4. Conditions to avoid** Heat and ignition sources, aging, contamination,

oxygen free atmosphere.

**10.5. Incompatible materials** Peroxides, amines, sulfur compounds, heavy metal

ions, alkalis, reducing agents and oxidizing agents.

10.6. Hazardous decomposition

**products** None when used as directed.

11. Toxicological information

Information on likely routes of exposure

**Inhalation** Relevant route of exposure. Information on effects are

given below.

**Skin Contact** Relevant route of exposure. Information on effects are

given below.

**Eye contact** Relevant route of exposure. Information on effects are

given below.

**Ingestion** If handled correctly, not a relevant route of exposure.

Information on effects are given below.

Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation:** Headache, Dizziness.

**Skin Contact:** Causes skin irritation. May cause allergic skin reaction.

**Eye contact:** Causes serious eye irritation.

**Ingestion:** If handled correctly, not a relevant route of exposure.

Information on effects are given below.

11.1. Information on toxicological effects

Acute toxicity

**Oral** 

**Product** Acute toxicity estimate: > 2,000 mg/kg

(Calculation method)

**Components** 

Methyl methacrylate LD 50 (Rat): > 5,000 mg/kg triethyleneglycol dimethacrylate LD 50 (Rat): > 5,000 mg/kg

N,N-bis-(2-hydroxypropyl)-p-toluidine LD 50 (Rat, male/female): 25 mg/kg

ethylene di(S-thioacetate) LD 50 (Rat, male): 303 mg/kg tris(nonylphenyl) phosphite LD 50 (Rat): > 16,200 mg/kg n-butyl acrylate LD 50 (Rat): 3,150 mg/kg

**Dermal** 

**Product** No data available.

**Components** 

Methyl methacrylate LD 50 (Rabbit): > 5,000 mg/kg triethyleneglycol dimethacrylate LD 50 (Mouse, male): > 2,000 mg/kg N,N-bis-(2-hydroxypropyl)-p-toluidine LD 50 (Rat, male/female): > 2,000 mg/kg

ethylene di(S-thioacetate) LD 50 (Rat): > 2,000 mg/kg

tris(nonylphenyl) phosphite LD 50 (Rabbit, male and female): > 2,000 mg/kg

n-butyl acrylate LD 50 (Rabbit, male): > 2,000 mg/kg

Inhalation

**Product** No data available.

**Components** 

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Methyl methacrylate LC 50 (Rat, 4 h)29.8 mg/l Vapour, Dusts, mists and

fumes

triethyleneglycol dimethacrylate Vapour, No data available. Dusts, mists and fumes,

No data available.

N,N-bis-(2-hydroxypropyl)-p-toluidine The substance or mixture has no acute inhalation

toxicity, Dusts, mists and fumes The substance or mixture has no acute inhalation toxicity, Vapour

ethylene di(S-thioacetate) LC 50 (Acute toxicity estimate): 1.5 mg/l

Dusts, mists and fumes LC 50 (Acute toxicity

estimate): 11 mg/l Vapour

tris(nonylphenyl) phosphite Vapour, No data available. Dusts, mists and fumes,

No data available.

n-butyl acrylate LC 50 (Rat): 10.3 mg/l Vapour Dust, mist and fumes,

No data available.

Repeated dose toxicity

**Product** No data available.

**Components** 

Methyl methacrylate NOAEL (Rat, Inhalation (Vapour)): 25 ppm

NOAEL (Rat, Oral): 2000 ppm

triethyleneglycol dimethacrylate NOAEL (Rat, Oral): 1,000 mg/kg

N,N-bis-(2-hydroxypropyl)-p-toluidine No data available. ethylene di(S-thioacetate) No data available.

tris(nonylphenyl) phosphite

No observed adverse effect level (Rat (male and

female), Oral, daily): 200 mg/kg

n-butyl acrylate No data available.

**Skin Corrosion/Irritation** 

**Product** Contact with skin may cause irritations.

**Components** 

Methyl methacrylate (Rabbit): Irritating.

triethyleneglycol dimethacrylate FDA 1959 Draize, occlusive (Rabbit, 24 h): Not

irritating

N,N-bis-(2-hydroxypropyl)-p-toluidine does not require labelling

ethylene di(S-thioacetate)
Not irritating
tris(nonylphenyl) phosphite
No data available.

n-butyl acrylate (Rabbit): Irritating. source: literature

(Rabbit, 24 h): Slightly irritating. source: literature

**Serious Eye Damage/Eye Irritation** 

**Product** Contact with the eyes may cause irritation.

**Components** 

Methyl methacrylate Not irritating

triethyleneglycol dimethacrylate OECD Guide-line 405 (Rabbit): Not irritating N,N-bis-(2-hydroxypropyl)-p-toluidine OECD Guide-line 405 (Rabbit): Irritant

ethylene di(S-thioacetate) (Rabbit): Irritating.

tris(nonylphenyl) phosphite OECD Guideline 405 (Rabbit): Not irritating

n-butyl acrylate (Rabbit): Irritating.

Respiratory or Skin Sensitization

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**Product** No data available.

**Components** 

Methyl methacrylate Local Lymph Node Assay (LLNA), OECD 429 (Mouse):

Skin sensitizer

triethyleneglycol dimethacrylate Local Lymph Node Assay (LLNA), OECD 429 (Mouse):

Skin sensitizer

N,N-bis-(2-hydroxypropyl)-p-toluidine Not a skin sensitizer.

ethylene di(S-thioacetate) Maximization Test, OECD 406 (Guinea Pig): Strong

skin sensitizer.

tris(nonylphenyl) phosphite Buehler Test, OECD 406 (Guinea Pig): Not a skin

sensitizer. Local Lymph Node Assay (LLNA), OECD

429 (Mouse): Not a skin sensitizer. May cause sensitization by skin contact. EU-CLP as per Regulation (EU) No. 1272/2008, Annex VI

Local Lymph Node Assay (LLNA), OECD 429

(Mouse): Skin sensitizer

Carcinogenicity

n-butyl acrylate

**Product** Contains no ingredient listed as a carcinogen (>0.1%).

**Components** 

Methyl methacrylate Not classified triethyleneglycol dimethacrylate Not classified N,N-bis-(2-hydroxypropyl)-p-toluidine Not classified ethylene di(S-thioacetate) Not classified tris(nonylphenyl) phosphite No data available. n-butyl acrylate Not carcinogenic

**Germ Cell Mutagenicity** 

In vitro

**Product** No data available.

**Components** 

Methyl methacrylate No data available.

triethyleneglycol dimethacrylate positive and negative. Not classified

N,N-bis-(2-hydroxypropyl)-p-toluidine (OECD TG 471) negative

ethylene di(S-thioacetate)

tris(nonylphenyl) phosphite

n-butyl acrylate

No data available.

No data available.

No data available.

In vivo

**Product** No data available.

**Components** 

Methyl methacrylate No data available.

triethyleneglycol dimethacrylate not mutagenic / no evidence of mutagenic effects

N,N-bis-(2-hydroxypropyl)-p-toluidine Ames test: negative ethylene di(S-thioacetate) No data available. tris(nonylphenyl) phosphite No data available. n-butyl acrylate No data available.

Reproductive toxicity

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**Product** Contains no ingredient listed as toxic to reproduction



(>0.1%).

**Components** 

Methyl methacrylate Not classified

triethyleneglycol dimethacrylate Animal testing did not show any effects on fertility.

N,N-bis-(2-hydroxypropyl)-p-toluidine Not classified ethylene di(S-thioacetate) Not classified tris(nonylphenyl) phosphite No data available.

n-butyl acrylate Animal testing did not show any effects on fertility.

**Specific Target Organ Toxicity - Single Exposure** 

**Product** No data available.

**Components** 

Methyl methacrylate Category 3 with respiratory tract irritation.

triethyleneglycol dimethacrylate no evidence for hazardous properties

N,N-bis-(2-hydroxypropyl)-p-toluidine Not classified based on available information.

ethylene di(S-thioacetate) Not classified tris(nonylphenyl) phosphite No data available.

n-butyl acrylate Respiratory Tract - Respiratory tract irritation.

**Specific Target Organ Toxicity - Repeated Exposure Product**No data available.

**Components** 

Methyl methacrylate Not classified

triethyleneglycol dimethacrylate no evidence for hazardous properties

N,N-bis-(2-hydroxypropyl)-p-toluidine Not classified ethylene di(S-thioacetate) Not classified tris(nonylphenyl) phosphite No data available. n-butyl acrylate Not classified

**Aspiration Hazard** 

**Product** No aspiration toxicity classification

**Components** 

Methyl methacrylate Not classified triethyleneglycol dimethacrylate Not classified N,N-bis-(2-hydroxypropyl)-p-toluidine Not classified ethylene di(S-thioacetate) Not classified tris(nonylphenyl) phosphite No data available.

n-butyl acrylate Not classified as an aspiration hazard.

11.2 Information on other hazards Endocrine disrupting properties

**Product:** The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Components:

Methyl methacrylate No data available. triethyleneglycol dimethacrylate No data available.

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N,N-bis-(2-hydroxypropyl)-p-toluidine No data available. ethylene di(S-thioacetate) No data available. tris(nonylphenyl) phosphite No data available. n-butyl acrylate No data available.

**Other adverse effects:** Avoid contact with the skin and eyes and inhalation of

the product vapours.

## 12. Ecological information

# 12.1. Toxicity

Acute hazards to the aquatic environment:

**Fish** 

**Product** No data available.

**Components** 

Methyl methacrylate LC 50 (Oncorhynchus mykiss, 96 h): > 79 mg/l

NOEC (Danio rerio, 32 d): 9.4 mg/l

triethyleneglycol dimethacrylate LC 50 (Danio rerio, 96 h): 16.4 mg/l N,N-bis-(2-hydroxypropyl)-p-toluidine LC 50 (Danio rerio, 96 h): 17 mg/l ethylene di(S-thioacetate) LC 50 (Leuciscus idus, 48 h): 4.85 mg/l

tris(nonylphenyl) phosphite LC 50 (Oncorhynchus mykiss, 96 h): > 100 mg/l

n-butyl acrylate LC 50 (Oncorhynchus mykiss, 96 h): > 5.2 mg/l

NOEC (Oncorhynchus mykiss, 96 h): 3.8 mg/l

**Aquatic Invertebrates** 

**Product** No data available.

**Components** 

Methyl methacrylate EC 50 (Daphnia magna (Water flea), 48 h): 69 mg/l

(OECD Test Guideline 202)

NOEC (Daphnia magna (Water flea), 21 d): 37 mg/l

(OECD Test Guideline 202)

triethyleneglycol dimethacrylate No data available.

N,N-bis-(2-hydroxypropyl)-p-toluidine EC 50 (Daphnia magna (Water flea), 48 h): 28.8 mg/l

(OECD TG 202)

ethylene di(S-thioacetate) EC 50 (Daphnia magna, 48 h): 11 mg/l

tris(nonylphenyl) phosphite EC 50 (Daphnia magna (Water flea), 48 h): 0.3 mg/l

(OECD TG 202) No toxicity at the limit of solubility

n-butyl acrylate EC 50 (Daphnia magna (Water flea), 48 h): 8.2 mg/l

NOEC (Daphnia magna, 48 h): 2.4 mg/l

**Toxicity to Aquatic Plants** 

**Product** No data available.

**Components** 

Methyl methacrylate EC 50 (Selenastrum capricornutum (green algae), 72

h): > 100 mg/l (OECD Test Guideline 201)

triethyleneglycol dimethacrylate EC 50 (Pseudokirchneriella subcapitata (green algae),

72 h): > 100 mg/l (OECD TG 201)

N,N-bis-(2-hydroxypropyl)-p-toluidine EC 50 (Desmodesmus subspicatus (green algae), 72 h):

245 mg/l (OECD TG 201)



ethylene di(S-thioacetate) EC 50 (Desmodesmus subspicatus (green algae), 72

h): > 100 mg/l (OECD 201)

tris(nonylphenyl) phosphite No data available.

n-butyl acrylate EC 50 (Selenastrum capricornutum (green algae), 96

h): 2.65 mg/l (OECD TG 201)

Toxicity to microorganisms

**Product** No data available.

**Components** 

Methyl methacrylate No data available. triethyleneglycol dimethacrylate No data available.

N,N-bis-(2-hydroxypropyl)-p-toluidine EC10 (30 min): > 1,995 mg/l (OECD Test Guideline

209)

ethylene di(S-thioacetate) No data available. tris(nonylphenyl) phosphite No data available.

n-butyl acrylate EC50 (Activated sludge, 0.5 h): > 1000 mg/l (OECD

209)

Chronic hazards to the aquatic environment:

**Fish** 

**Product** No data available.

**Components** 

Methyl methacrylate No data available. triethyleneglycol dimethacrylate No data available. N,N-bis-(2-hydroxypropyl)-p-toluidine No data available. ethylene di(S-thioacetate) No data available. tris(nonylphenyl) phosphite No data available. n-butyl acrylate No data available.

**Aquatic Invertebrates** 

**Product** No data available.

**Components** 

Methyl methacrylate No data available.

triethyleneglycol dimethacrylate NOEC (Daphnia magna, 21 d): 32 mg/l

N,N-bis-(2-hydroxypropyl)-p-toluidine No data available. ethylene di(S-thioacetate) No data available.

tris(nonylphenyl) phosphite NOEC (Daphnia magna, 21 d): > 0.1 mg/l

No toxicity at the limit of solubility

n-butyl acrylate NOEC (Daphnia magna, 21 d): 0.136 mg/l

Lowest Observed Effect Concentration (Daphnia

magna, 21 d): 0.457 mg/l

**Toxicity to Aquatic Plants** 

**Product** No data available.

**Components** 

Methyl methacrylate NOEC (Selenastrum capricornutum (green algae),

72 h): > 100 mg/l (OECD Test Guideline 201)

triethyleneglycol dimethacrylate NOEC (Pseudokirchneriella subcapitata (green algae),

72 h): 18.6 mg/l (OECD TG 201)

N,N-bis-(2-hydroxypropyl)-p-toluidine No data available.

ethylene di(S-thioacetate) NOEC (Desmodesmus subspicatus (green algae), 72 h):

>= 100 mg/l (OECD 201)



tris(nonylphenyl) phosphite NOEC (Raphidocelis subcapitata (freshwater green

alga), 72 h): 100 mg/l (OECD TG 201)

n-butyl acrylate NOEC (Selenastrum capricornutum (green algae),

96 h): < 1.8 mg/l (OECD 201)

Toxicity to microorganisms

**Product:** No data available.

**Components** 

Methyl methacrylate No data available. triethyleneglycol dimethacrylate No data available. N,N-bis-(2-hydroxypropyl)-p-toluidine No data available. ethylene di(S-thioacetate) No data available. tris(nonylphenyl) phosphite No data available. n-butyl acrylate No data available.

12.2 Persistence and Degradability

Biodegradation

**Product** (14 d, OECD 301 C): 94 % Readily biodegradable

Related to substance: methyl methacrylate

Components

Methyl methacrylate (14 d, OECD 301 C): 94 % The product is easily

biodegradable.

triethyleneglycol dimethacrylate (28 d): 85 % The product is easily biodegradable

N,N-bis-(2-hydroxypropyl)-p-toluidine (28 d, OECD 301 B): 39 % The product is not

biodegradable.

ethylene di(S-thioacetate) (28 d, OECD 301 D): 65.9 % The product is easily

biodegradable.

tris(nonylphenyl) phosphite (28 d, OECD 301 D): < 4 %

n-butyl acrylate (28 d, literature): 60 % The product is easily

biodegradable.

(28 d, ISO 14593): > 80 % The product is easily

biodegradable.

**BOD/COD Ratio** 

**Product** No data available.

**Components** 

Methyl methacrylate No data available. triethyleneglycol dimethacrylate No data available. N,N-bis-(2-hydroxypropyl)-p-toluidine No data available. ethylene di(S-thioacetate) No data available. tris(nonylphenyl) phosphite No data available. n-butyl acrylate No data available.

12.3 Bioaccumulative potential

**Product** no specific test data available no evidence for

hazardous properties (structure-activity-relationships)

(analogy)

Components

Methyl methacrylate No data available.

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triethyleneglycol dimethacrylate Accumulation in organisms is not expected due to the

coefficient of distribution of n-octanol in water (log

Pow).

N,N-bis-(2-hydroxypropyl)-p-toluidine No data available.

ethylene di(S-thioacetate) Bioconcentration Factor (BCF): 2.82

tris(nonylphenyl) phosphite No data available.

n-butyl acrylate Accumulation in organisms is not expected due to the

coefficient of distribution of n-octanol in water (log

Pow).

Partition Coefficient n-octanol / water (log Kow)

**Product:** Log Kow: Not available.

**Components** 

Methyl methacrylate Log Kow: 1.38

triethyleneglycol dimethacrylate Log Kow: 2.3 20 °C (OECD 117) N,N-bis-(2-hydroxypropyl)-p-toluidine Log Kow: 2.1 (OECD 107)

ethylene di(S-thioacetate) Log Kow: 1.46 20 °C (OECD 117)

tris(nonylphenyl) phosphite No data available. n-butyl acrylate Log Kow: 2.36

Log Kow: 2.38 (25 °C)

12.4 Mobility in soil

**Product:** no specific test data available

**Components** 

Methyl methacrylate No data available. triethyleneglycol dimethacrylate No data available. N,N-bis-(2-hydroxypropyl)-p-toluidine No data available. ethylene di(S-thioacetate) No data available. tris(nonylphenyl) phosphite No data available.

n-butyl acrylate The product evaporates slowly.

12.5 Results of PBT and vPvB

**Product:** This substance/mixture contains no components

considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumu-

lative (vPvB) at levels of 0.1% or higher.

**Components** 

Methyl methacrylate Non-classified vPvB substance

Non-classified PBT substance

triethyleneglycol dimethacrylate Non-classified vPvB substance

Non-classified PBT substance

N,N-bis-(2-hydroxypropyl)-p-toluidine Non-classified vPvB substance

Non-classified PBT substance

ethylene di(S-thioacetate)

Non-classified vPvB substance

Non-classified PBT substance

tris(nonylphenyl) phosphite

Non-classified vPvB substance

Non-classified PBT substance

n-butyl acrylate Non-classified vPvB substance

Non-classified PBT substance

12.6. Endocrine disrupting properties:

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**Product:** This substance/mixture contains components

considered to have endocrine disrupting properties for environment, according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission

Delegated Regulation (EU) 2017/2100.

Methyl methacrylate No data available triethyleneglycol dimethacrylate No data available N,N-bis-(2-hydroxypropyl)-p-toluidine No data available ethylene di(S-thioacetate) No data available

disrupting properties according to REACH Article

57(f) for the environment.

n-butyl acrylate No data available

12.7 Other adverse effects

Other hazards

**Product:** Prevent substance from entering soil, natural bodies of

water and sewer systems.

#### 13. Disposal considerations

### 13.1. Waste treatment methods

General information No data available.

Disposal methods Waste is hazardous. It must be disposed of in

accordance with the regulations after consultation of the competent local authorities and the disposal company in a suitable and licensed facility.

Uncleaned packaging Contaminated packaging should ideally be emptied; it

can then be recycled after having been decontaminated. Packaging that cannot be cleaned should be disposed of professionally. Uncontaminated packaging may be

taken for recycling.

#### 14. Transport Information

## Transport on land (ADR/RID/GGVS EB)

# 14.1. UN number

ADR UN1866
RID UN1866
IMDG UN1866
IATA UN1866

14.2. UN proper shipping name

ADR
RID
RESIN SOLUTION
RESIN SOLUTION
RESIN SOLUTION
RESIN SOLUTION
RESIN SOLUTION
Resin solution

**14.3.** Transport hazard class(es)

 ADR
 3

 RID
 3

 IMDG
 3

 IATA
 3

14.4. Packing group

ADR

Packing group II

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Classification Code F1 Hazard Identification Number 33 Labels 3

Remarks Special provision 640D, observe §35 GGVSEB

RID

Packing group H Classification Code F1 Hazard Identification Number 33 Labels 3

Remarks Special provision 640D

**IMDG** 

II Packing group Labels 3

EmS Code F-E,S-E

IATA (Cargo aircraft only)

Packing instruction (cargo aircraft) 364 Packing instruction (LQ) Y341 Packing group II Labels 3

IATA (Passenger and cargo aircraft)

Packing instruction

(passenger aircraft) 353 Packing instruction (LQ) Y341 Packing group II Labels 3

14.5. Environmental hazards

**ADR** 

No Environmentally hazardous

Environmentally hazardous No

**IMDG** 

Marine pollutant No

# 14.6. Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.

#### **15. Regulatory information**

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

EU. REACH Annex XIV, Substances Subject to Authorization: none

EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17: none Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: none

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended: none

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC):

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Chemical name	CAS-No.	Concentration	Additional information
tris(nonylphenyl) phosphite	26523-78-4		Endocrine disrupting properties (Article 57(f) - environment)

# Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

Chemical name	CAS-No.	Concentration
Methyl methacrylate	80-62-6	

# EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I:

P5c. Flammable liquids 5,000 t 50,000 t

ATTENTION: Classification into hazard category P5c is a minimum classification. Only the operator may estimate if the product is covered by hazard category P5a or P5c. For P5a and P5b different qualifying quantities are valid.

# **National Regulations**

Please note Directive 94/33/EC (Protection of Young Workers at the Workplace Directive) and amendments. Please note Directive 92/85/EEC (Pregnant Workers Directive) and amendments.

# 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## **Inventory Status:**

Registration, Evaluation and

Authorisation of Chemicals (REACH): preregistered, registered or exempted US TSCA Inventory: On or in compliance with the inventory Canada DSL Inventory List: On or in compliance with the inventory

Canada NDSL Inventory:

Australia AICS:

Japan (ENCS) List:

Not on Inventory.

Not on Inventory.

Not on Inventory.

Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Philippines PICCS:

On or in compliance with the inventory

China Inv. Existing

Chemical Substances: On or in compliance with the inventory

**International regulations** 

Montreal protocolNot applicableStockholm conventionNot applicableRotterdam conventionNot applicableKyoto protocolNot applicable

# 16. Other Information

## Abbreviations and acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ADN -European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; AGW -Occupational exposure limit; ASTM - American Society for Testing and Materials; AwSV - Ordinance on facilities for handling substances that are hazardous to water; BSB - Biochemical oxygen demand; c.c. - closed cup; CAS -Chemical Abstract Services; CESIO - European Committee of Organic Surfactants and their Intermediates; CSB -Chemical oxygen demand; DMEL - Derived minimum effect level; DNEL - Derived no effect level; EbC50 - median concentration in terms of reduction of growth; EC -Effective concentration; EINECS - European Inventory of Existing Commercial Chemical Substances; EN - European norm; ErC50 - median concentration in terms of reduction of growth rate; GGVSEB - German ordinance for road, rail and inland waterway transportation of dangerous goods; GGVSee - German ordinance for sea transportation of dangerous goods; GLP - Good Laboratory Practice; GMO - Genetic Modified Organism; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; ISO - International Organization For Standardization; LD/LC -lethal dosis/concentration; LOAEL - Lowest observed adverse effect level; LOEL - Lowest observed effect level; M-Factor - multiplying factor; NOAEL - No observed adverse effect level; NOEC - no observed effect concentration; NOEL - no observed effect level; o.c. - open cup; OECD - Organisation for Economic Cooperation and Development; OEL - Occupational Exposure Limit; PBT - Persistent, bioaccumulative, toxic;

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PNEC - Predicted no effect concentration; REACH - REACH registration; RID - Convention concerning International Carriage by Rail; SVHC - Substances of Very High Concern; TA - Technical Instructions; TRGS - Technical Rules for Hazardous Substances; vPvB - very persistent, very bioaccumulative; WGK - Water Hazard Class

#### **Notes:**

Methyl methacrylate	Note D	Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.
n-butyl acrylate		

Classification and applied procedure to derive the classification of mixtures according to Regulation (EC) No.1272/2008 (CLP)

Classification	Classification procedure	
Flammable liquids, Category 2	On basis of test data.	
Skin irritation, Category 2	Calculation method	
Skin sensitizer, Category 1	Calculation method	
Specific Target Organ Toxicity		
- Single Exposure, Category 3	Calculation method	

## Wording of the H-statements in section 2 and 3

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H300 Fatal if swallowed.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled
- H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- H410 Very toxic for aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

#### Other information

The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution.

### **Disclaimer:**

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qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

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