

## SAFETY DATA SHEET

## RESION Vinylester Resin

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

**1.1. Product identifier**

## Trade name

RESION Vinylester Resin

## Product no.

PR09

## Unique formula identifier (UFI)

FS00-A0K6-K005-N807

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

## Relevant identified uses of the substance or mixture

Binder

## Uses advised against

None known.

**1.3. Details of the supplier of the safety data sheet**

## Company and address

**Polyestershoppen BV**

Oostbaan 680

2841 ML Moordrecht

Netherlands

+31 85 0220090

## Contact person

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## E-mail

info@polyestershoppen.nl

## Revision

20/10/2022

## SDS Version

1.0

**1.4. Emergency telephone number**

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

## SECTION 2: Hazards identification

**2.1. Classification of the substance or mixture**

Flam. Liq. 3; H226, Flammable liquid and vapour.

Asp. Tox. 1; H304, May be fatal if swallowed and enters airways.

Skin Irrit. 2; H315, Causes skin irritation.

Eye Irrit. 2; H319, Causes serious eye irritation.

Acute Tox. 4; H332, Harmful if inhaled.

STOT SE 3; H335, May cause respiratory irritation.

Repr. 2; H361, Suspected of damaging fertility or the unborn child.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

STOT RE 1; H372, Causes damage to organs through prolonged or repeated exposure.

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

## 2.2. Label elements

### Hazard pictogram(s)



### Signal word

Danger

### Hazard statement(s)

Flammable liquid and vapour. (H226)

May be fatal if swallowed and enters airways. (H304)

Causes skin irritation. (H315)

Causes serious eye irritation. (H319)

Harmful if inhaled. (H332)

May cause respiratory irritation. (H335)

Suspected of damaging fertility or the unborn child. (H361)

Causes damage to organs through prolonged or repeated exposure. (H372)

Harmful to aquatic life with long lasting effects. (H412)

### Safety statement(s)

#### General

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

#### Prevention

Do not breathe vapour/mist. (P260)

Do not eat, drink or smoke when using this product. (P270)

#### Response

IF SWALLOWED: Immediately call a POISON CENTER/doctor. (P301+P310)

Get medical advice/attention if you feel unwell. (P314)

#### Storage

Store locked up. (P405)

#### Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

### Hazardous substances

styrene

### Additional labelling

Not applicable.

## 2.3. Other hazards

### Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
styrene	CAS No.: 100-42-5 EC No.: 202-851-5	25-40%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315	

UK-REACH:	Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 Repr. 2, H361 STOT RE 1, H372 Aquatic Chronic 3, H412
Index No.: 601-026-00-0	

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See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

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## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

#### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.

#### Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

Do not induce vomiting! If vomiting occurs, keep head facing down so that vomit does not get into the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should therefore be kept under medical attention for at least 48 hours.

#### Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

This product contains substances that can cause chemical pneumonia if swallowed. Symptoms of chemical pneumonia may appear after several hours.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO<sub>2</sub>)

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Avoid inhalation of vapours from spilled material.

### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

### 6.3. Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof [electrical/lighting/ventilating] equipment.

Use non-sparking tools.

Take action to prevent static discharges.

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

The product should be tested for peroxide formation or discarded after 6 months.

Peroxide formation may be present anywhere in the container, including the sides, bottom, exterior and threaded cap. Peroxide formation in ppm concentrations may not be visually observable and must be identified through the use of appropriate testing procedures. If any of the following conditions exist, the material may be explosively unstable and will require stabilization prior to use:

1. Material appears to be degraded and or contaminated.
2. Material appears to be discolored.
3. Deterioration or distortion of storage container.
4. Thermal shock (sunlight).
5. Age of material exceeds recommended storage time.

Avoid direct contact with the product.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

**Recommended storage material**

Keep only in original packaging.

**Storage temperature**

Dry, cool and well ventilated

**Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

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

This product should only be used for applications quoted in section 1.2

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

— styrene

Long term exposure limit (8 hours) (ppm): 100

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 430

Short term exposure limit (15 minutes) (ppm): 250

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 1080

— methacrylic acid;2-methylpropenoic acid

Long term exposure limit (8 hours) (ppm): 20

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 72

Short term exposure limit (15 minutes) (ppm): 40

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 143

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

**DNEL**

methacrylic acid;2-methylpropenoic acid

Duration	Route of exposure	DNEL
Long term - Local effects - General population	Dermal	230 µg/cm <sup>2</sup>
Long term - Local effects - Workers	Dermal	380 µg/cm <sup>2</sup>
Long term - Systemic effects - General population	Dermal	5.35 mg/kg bw/day
Long term - Systemic effects - Workers	Dermal	4.25 mg/kg bw/day
Long term - Local effects - General population	Inhalation	8.8 mg/m <sup>3</sup>

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Long term – Local effects - Workers	Inhalation	44 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	11.7 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	39.3 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	5.35 mg/kg bw/day

#### styrene

Duration	Route of exposure	DNEL
Long term – Systemic effects - General population	Dermal	343 mg/kg/day
Long term – Systemic effects - General population	Dermal	343 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	406 mg/kg/day
Long term – Systemic effects - Workers	Dermal	406 mg/kg bw/day
Long term – Local effects - General population	Inhalation	1 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	100 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	10,2 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	1 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	85 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	85 mg/m <sup>3</sup>
Short term – Local effects - General population	Inhalation	182,75 mg/m <sup>3</sup>
Short term – Local effects - General population	Inhalation	10 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	306 mg/m <sup>3</sup>

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Short term – Local effects - Workers	Inhalation	100 mg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	174,25 mg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	10 mg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	289 mg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	100 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	2,1 mg/kg/day
Long term – Systemic effects - General population	Oral	7.7 µg/kgbw/day

#### PNEC

##### methacrylic acid;2-methylpropenoic acid

Route of exposure	Duration of Exposure	PNEC
Freshwater		820 µg/L
Freshwater sediment		3.09 mg/kg
Intermittent release (freshwater)		450 µg/L
Marine water		82 µg/L
Marine water sediment		309 µg/kg
Sewage treatment plant		100 mg/L
Soil		137 µg/kg

##### styrene

Route of exposure	Duration of Exposure	PNEC
Freshwater	Single	0,028 mg/L
Freshwater		28-40 µg/L
Freshwater sediment	Single	0,614 mg/kg
Freshwater sediment		418-614 µg/kg
Intermittent release	Single	0,04 mg/L
Intermittent release (freshwater)		40 µg/L
Marine water	Single	0,014 mg/L

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Marine water		14-40 µg/L
Marine water sediment	Single	0,307 mg/kg
Marine water sediment		307-418 µg/kg
Sewage treatment plant	Single	5 mg/L
Sewage treatment plant		5 mg/L
Soil	Single	0,2 mg/kg
Soil		146-200 µg/kg

## 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

### Exposure scenarios

There are no exposure scenarios implemented for this product.

### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

### Appropriate technical measures

Do not recirculate outlet air that contain the substances.

### Hygiene measures

Take off contaminated clothing and wash it before reuse.

### Measures to avoid environmental exposure


Keep damming materials near the workplace. If possible, collect spillage during work.

## 8.3. Individual protection measures, such as personal protective equipment


### Generally

Use only UKCA marked protective equipment.

### Respiratory Equipment

Work situation	Type	Class	Colour	Standards	
In the event of prolonged exposure or high concentrations	A	Class 2 (medium capacity)	Brown	EN14387	
In case of inadequate ventilation	No specific requirements				

### Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

### Hand protection



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0,2	> 240	EN374-2, EN374-3, EN388



### Eye protection

Type	Standards
Safety glasses with side shields.	EN166



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Physical state

Liquid

#### Colour

Turbid

#### Odour / Odour threshold

Characteristic

#### pH

Testing not relevant or not possible due to the nature of the product.

#### Density (g/cm<sup>3</sup>)

1.09

#### Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

#### Particle characteristics

Does not apply to liquids.

### Phase changes

#### Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

#### Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

#### Boiling point (°C)

100-200

#### Vapour pressure

6 hPa (20 °C)

#### Relative vapour density

Testing not relevant or not possible due to the nature of the product.

#### Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

### Data on fire and explosion hazards

#### Flash point (°C)

34

#### Ignition (°C)

Testing not relevant or not possible due to the nature of the product.

#### Auto flammability (°C)

Testing not relevant or not possible due to the nature of the product.

#### Lower and upper explosion limit (% v/v)

1.1 - 8

### Solubility

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

**Solubility in water**

Insoluble

**n-octanol/water coefficient**

Testing not relevant or not possible due to the nature of the product.

**Solubility in fat (g/L)**

Testing not relevant or not possible due to the nature of the product.

**9.2. Other information**

**Other physical and chemical parameters**

No data available.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Highly reactive and can auto-polymerize as a result of internal peroxide accumulation. The peroxides formed in these reactions are extremely shock- and heat-sensitive.

**10.2. Chemical stability**

The product is stable under the conditions, noted in section 7 "Handling and storage".

**10.3. Possibility of hazardous reactions**

None known.

**10.4. Conditions to avoid**

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

**10.5. Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**10.6. Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

Product/substance	styrene
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	>5000 mg/kgbw
Other information	
Product/substance	styrene
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	>2000 mg/kgbw
Other information	

Harmful if inhaled.

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory sensitisation**

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

**Skin sensitisation**

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

**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 fertility or the unborn child.

**STOT-single exposure**

May cause respiratory irritation.

**STOT-repeated exposure**

Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

May be fatal if swallowed and enters airways.

**11.2. Information on other hazards**

**Long term effects**

**Reproductive toxicity:** This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders. This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cycle.

**Irritation effects:** This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

**Neurotoxic effects:** This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

**Endocrine disrupting properties**

None known.

**Other information**

styrene has been classified by IARC as a group 2A carcinogen.

**SECTION 12: Ecological information**

**12.1. Toxicity**

Product/substance	styrene
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	3,24 - 4,99 mg/L

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Other information	
Product/substance	styrene
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	4,7 mg/L
Other information	
Product/substance	styrene
Test method	
Species	Daphnia
Compartment	
Duration	21 days
Test	NOEC
Result	1,01 mg/L
Other information	
Product/substance	styrene
Test method	
Species	Daphnia
Compartment	
Duration	96 hours
Test	LC50
Result	9,5 mg/L
Other information	
Product/substance	styrene
Test method	
Species	Algae
Compartment	
Duration	96 hours
Test	EC50
Result	6,3 mg/L
Other information	

**12.2. Persistence and degradability**

No data available.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

### 12.3. Bioaccumulative potential

Product/substance	styrene
Test method	
Potential bioaccumulation	No data available.
LogPow	2.95
BCF	No data available.
Other information	

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

### 12.6. Endocrine disrupting properties

None known.

### 12.7. Other adverse effects

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

## SECTION 13: Disposal considerations

### Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 6 - Acute toxicity

HP 10 – Toxic for reproduction

HP 14 – Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

### EWC code

Not applicable.


### Specific labelling

Not applicable.



### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	UN1866	RESIN SOLUTION	Class: 3 Labels: 3 Classification code: F1 	III	No	Limited quantities: 5 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1866	RESIN SOLUTION	Class: 3 Labels: 3	III	No	Limited quantities: 5 L

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
		Classification code: F1 			EmS: F-E S-E See below for additional information.
IATA UN1866	RESIN SOLUTION	Class: 3 Labels: 3 Classification code: F1 	III	No	See below for additional information.

\* Packing group

\*\* Environmental hazards

#### Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Maritime transport in bulk according to IMO instruments

No data available.

## SECTION 15: Regulatory information

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

#### Restrictions for application

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

#### Demands for specific education

No specific requirements.

#### SEVESO - Categories / dangerous substances

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

#### Additional information

Tactile warning.

If this product is sold in retail, it must be delivered with child-resistant fastening.

#### Sources

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

### 15.2. Chemical safety assessment

No

**SECTION 16: Other information****Full text of H-phrases as mentioned in section 3**

H226, Flammable liquid and vapour.  
H304, May be fatal if swallowed and enters airways.  
H315, Causes skin irritation.  
H319, Causes serious eye irritation.  
H332, Harmful if inhaled.  
H335, May cause respiratory irritation.  
H361, Suspected of damaging fertility or the unborn child.  
H372, Causes damage to organs through prolonged or repeated exposure.  
H412, Harmful to aquatic life with long lasting effects.

**Abbreviations and acronyms**

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
CAS = Chemical Abstracts Service  
CE = Conformité Européenne  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
CSA = Chemical Safety Assessment  
CSR = Chemical Safety Report  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EINECS = European Inventory of Existing Commercial chemical Substances  
ES = Exposure Scenario  
EUH statement = CLP-specific Hazard statement  
EWC = European Waste Catalogue  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IARC = International Agency for Research on Cancer (IARC)  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
OECD = Organisation for Economic Co-operation and Development  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
RRN = REACH Registration Number  
SCL = A specific concentration limit  
SVHC = Substances of Very High Concern  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
TWA = Time weighted average  
UN = United Nations  
UVBC = Unknown or variable composition, complex reaction products or of biological materials  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

**Additional information**

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.  
The classification of the substance/mixture in regard of environmental hazards are in accordance with the

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

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calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.  
The classification of the mixture in regard to physical hazards has been based on experimental data.

**The safety data sheet is validated by**

H.A.B.

**Other**

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en