Safety Data Sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)

GENERIC EU SDS - NO COUNTRY SPECIFIC DATA

Polyester putty - GAPOL

Version number: 1.0 Date of compilation: 2025-10-21

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

1.1 Product identifier

Trade name **Polyester putty - GAPOL**

Article number GAP 00

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

Relevant identified uses Putty
For professional users only

1.3 Details of the supplier of the safety data sheet

Chemicar Europe NV
Baarbeek 2
2070 Zwijndrecht
Belgium

Telephone: +32 3 234 87 80
e-mail: msds@emm.com
Website: www.finixa.com

Additional information

Importer					
Country	**Name**	**Street**	**City**	**Telephone**	**Website**
New Zealand	Paint Smart Group NZ	10 Barberry Street	Judea, Tauranga	07 571 8921	www.paintsmart.co.nz

e-mail (competent person) msds@emm.com

1.4 Emergency telephone number

Emergency information service +31 38 4676600
This number is only available during the following office hours: Mon-Fri 09:00 - 17:00, CET: Central European Time

Poison centre		
Country	**Name**	**Telephone**
New Zealand	National Poisons Centre	0800 764 766

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard state-ment
2.6	flammable liquid	3	Flam. Liq. 3	H226
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.4S	skin sensitisation	1	Skin Sens. 1	H317
3.7	reproductive toxicity	2	Repr. 2	H361d
3.9	specific target organ toxicity - repeated exposure	1	STOT RE 1	H372

For full text of H-phrases: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure. The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling

- signal word: Danger

- pictograms

GHS02, GHS07, GHS08



- hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs (hearing organs) through prolonged or repeated exposure.

- precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235	Store in a well-ventilated place. Keep cool.

- hazardous ingredients for labelling

Contains: Maleic anhydride; styrene; 2,2'-(m-tolylimino)diethanol; Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-.

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.

Endocrine disrupting properties

Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%. (Section 11 & 12).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

The product does not contain (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes	Remarks
styrene	CAS No 100-42-5 EC No 202-851-5 REACH Reg. No 01-2119457861-32-xxxx	≥ 10 – < 15	Flam. Liq. 3 / H226 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Repr. 2 / H361d STOT SE 3 / H335 STOT RE 1 / H372 Asp. Tox. 1 / H304 Aquatic Chronic 3 / H412		D GHS-HC	EDC
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-	EC No 911-490-9 REACH Reg. No 01-2119979579-10-xxxx	≥ 0.1 – < 1	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1 / H317 Aquatic Chronic 3 / H412			
2,2'-(m-tolylimino)diethanol	CAS No 91-99-6 EC No 202-114-8 REACH Reg. No 01-2120791683-42-xxxx	≥ 0.1 – < 1	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1B / H317 STOT RE 2 / H373			
Maleic anhydride	CAS No 108-31-6 EC No 203-571-6 REACH Reg. No 01-2119472428-31-xxxx	≥ 0.001 – < 0.1	Acute Tox. 4 / H302 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Resp. Sens. 1 / H334 Skin Sens. 1A / H317 STOT RE 1 / H372 EUH071		GHS-HC	

Notes

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'.

EDC: endocrine disrupting chemicals

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

Name of substance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
styrene	CAS No 100-42-5	-	-	11.8 $^{mg}/_{l}$/4h	inhalation: vapour
2,2'-(m-tolylimino)diethanol	CAS No 91-99-6	-	-	>300 $^{mg}/_{kg}$	oral
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		-	-	619 $^{mg}/_{kg}$	oral
Maleic anhydride	CAS No 108-31-6	Skin Sens. 1A; H317: C ≥ 0.001 %	-	1,090 $^{mg}/_{kg}$	oral

Remarks

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water. Call a POISON CENTER/doctor.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray; Alcohol resistant foam; Dry extinguishing powder; Carbon dioxide (CO2);
Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

During fire hazardous fumes/smoke could be produced. Carbon monoxide (CO). Carbon dioxide (CO2).

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight.

Consideration of other advice

Store in a well-ventilated place. Keep container tightly closed.

- ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
styrene	100-42-5	DNEL	85 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
styrene	100-42-5	DNEL	289 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
styrene	100-42-5	DNEL	306 mg/m³	human, inhalatory	worker (industry)	acute - local effects
styrene	100-42-5	DNEL	406 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
styrene	100-42-5	DNEL	10.2 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
styrene	100-42-5	DNEL	174.3 mg/m³	human, inhalatory	consumer (private households)	acute - systemic effects
styrene	100-42-5	DNEL	182.8 mg/m³	human, inhalatory	consumer (private households)	acute - local effects
styrene	100-42-5	DNEL	343 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
styrene	100-42-5	DNEL	2.1 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
2,2'-(m-tolylimino)diethanol	91-99-6	DNEL	0.8 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2,2'-(m-tolylimino)diethanol	91-99-6	DNEL	0.8 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
2,2'-(m-tolylimino)diethanol	91-99-6	DNEL	0.23 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2,2'-(m-tolylimino)diethanol	91-99-6	DNEL	0.24 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
2,2'-(m-tolylimino)diethanol	91-99-6	DNEL	0.24 mg/m³	human, inhalatory	consumer (private households)	acute - systemic effects
2,2'-(m-tolylimino)diethanol	91-99-6	DNEL	0.07 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
2,2'-(m-tolylimino)diethanol	91-99-6	DNEL	0.14 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
2,2'-(m-tolylimino)diethanol	91-99-6	DNEL	0.14 mg/kg bw/day	human, oral	consumer (private households)	acute - systemic effects
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		DNEL	9.8 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		DNEL	1.4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		DNEL	1.74 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		DNEL	0.5 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		DNEL	0.5 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
Maleic anhydride	108-31-6	DNEL	0.081 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Maleic anhydride	108-31-6	DNEL	0.2 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Maleic anhydride	108-31-6	DNEL	0.081 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Maleic anhydride	108-31-6	DNEL	0.2 mg/m³	human, inhalatory	worker (industry)	acute - local effects

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
styrene	100-42-5	PNEC	0.028 mg/l	aquatic organisms	freshwater	short-term (single instance)
styrene	100-42-5	PNEC	0.014 mg/l	aquatic organisms	marine water	short-term (single instance)
styrene	100-42-5	PNEC	5 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
styrene	100-42-5	PNEC	0.614 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
styrene	100-42-5	PNEC	0.307 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
styrene	100-42-5	PNEC	0.2 mg/kg	terrestrial organisms	soil	short-term (single instance)
2,2'-(m-tolylimino)diethanol	91-99-6	PNEC	0.107 mg/l	aquatic organisms	freshwater	short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
2,2'-(m-tolylimino)di-ethanol	91-99-6	PNEC	0.011 mg/l	aquatic organisms	marine water	short-term (single instance)
2,2'-(m-tolylimino)di-ethanol	91-99-6	PNEC	81.7 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2,2'-(m-tolylimino)di-ethanol	91-99-6	PNEC	2.16 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2,2'-(m-tolylimino)di-ethanol	91-99-6	PNEC	0.22 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
2,2'-(m-tolylimino)di-ethanol	91-99-6	PNEC	0.37 mg/kg	terrestrial organ-isms	soil	short-term (single instance)
Reaction mass of 2,2'-[(4-methyl-phenyl)imino]biseth-anol and Ethanol 2-[[2-(2-hydroxyeth-oxy)ethyl](4-methyl-phenyl)amino]-		PNEC	0.048 mg/l	aquatic organisms	freshwater	short-term (single instance)
Reaction mass of 2,2'-[(4-methyl-phenyl)imino]biseth-anol and Ethanol 2-[[2-(2-hydroxyeth-oxy)ethyl](4-methyl-phenyl)amino]-		PNEC	0.005 mg/l	aquatic organisms	marine water	short-term (single instance)
Reaction mass of 2,2'-[(4-methyl-phenyl)imino]biseth-anol and Ethanol 2-[[2-(2-hydroxyeth-oxy)ethyl](4-methyl-phenyl)amino]-		PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Reaction mass of 2,2'-[(4-methyl-phenyl)imino]biseth-anol and Ethanol 2-[[2-(2-hydroxyeth-oxy)ethyl](4-methyl-phenyl)amino]-		PNEC	1.2 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Reaction mass of 2,2'-[(4-methyl-phenyl)imino]biseth-anol and Ethanol 2-[[2-(2-hydroxyeth-oxy)ethyl](4-methyl-phenyl)amino]-		PNEC	0.12 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Reaction mass of 2,2'-[(4-methyl-phenyl)imino]biseth-anol and Ethanol 2-[[2-(2-hydroxyeth-oxy)ethyl](4-methyl-phenyl)amino]-		PNEC	0.21 mg/kg	terrestrial organ-isms	soil	short-term (single instance)
Maleic anhydride	108-31-6	PNEC	0.038 mg/l	aquatic organisms	freshwater	short-term (single instance)
Maleic anhydride	108-31-6	PNEC	0.004 mg/l	aquatic organisms	marine water	short-term (single instance)
Maleic anhydride	108-31-6	PNEC	44.6 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

Relevant PNECs of components						
Name of sub-stance	**CAS No**	**End-point**	**Threshold level**	**Organism**	**Environmental compartment**	**Exposure time**
Maleic anhydride	108-31-6	PNEC	0.296 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
Maleic anhydride	108-31-6	PNEC	0.03 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
Maleic anhydride	108-31-6	PNEC	0.037 $^{mg}/_{kg}$	terrestrial organ-isms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection

Skin protection



Chemical protective clothing.

Hand protection



Wear suitable gloves. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The 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.

- type of material

Fluorocarbon rubber (Viton®)

- material thickness

Use gloves with a minimum material thickness: ≥ 0,7 mm.

- breakthrough time of the glove material

Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: ABEK-P2 (combined filters against gases, vapours and particles, colour code: Brown/Grey/Yellow/Green/White).

Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid (viscous)
Colour	black

Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	145 °C at 1,013 hPa calculated value, referring to a component of the mixture
Flammability	flammable liquid in accordance with GHS criteria
Lower and upper explosion limit	LEL: 0.9 vol% / UEL: 6.8 vol% calculated value, referring to a component of the mixture
Flash point	34 °C (DIN 53213)
Auto-ignition temperature	490 °C (auto-ignition temperature (liquids and gases)) calculated value, referring to a component of the mixture
Decomposition temperature	no data available
pH (value)	not determined
Kinematic viscosity	not determined
Dynamic viscosity	77,500 – 92,500 mPa s at 20 °C
Solubility	not determined

Partition coefficient n-octanol/water (log value)	this information is not available

Vapour pressure	35 hPa at 50 °C

Density and/or relative density

Density	1.828 $^{g}/_{cm^3}$ at 20 °C (DIN 53217)
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)

9.2 Other information

Information with regard to physical hazard classes	there is no additional information
Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

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

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
styrene	100-42-5	inhalation: vapour	11.8 mg/l/4h
2,2'-(m-tolylimino)diethanol	91-99-6	oral	>300 mg/kg
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		oral	619 mg/kg
Maleic anhydride	108-31-6	oral	1,090 mg/kg

Acute toxicity of components

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
styrene	100-42-5	oral	LD50	5,000 mg/kg	rat
styrene	100-42-5	inhalation: vapour	LC50	11.8 mg/l/4h	rat
styrene	100-42-5	dermal	LD50	>2,000 mg/kg	rat
2,2'-(m-tolylimino)diethanol	91-99-6	oral	LD50	>300 – <2,000 mg/kg	rat
2,2'-(m-tolylimino)diethanol	91-99-6	dermal	LD50	>2,000 mg/kg	rat
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		oral	LD50	619 mg/kg	rat
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		dermal	LD50	>2,000 mg/kg	rat

Acute toxicity of components					
Name of substance	**CAS No**	**Exposure route**	**Endpoint**	**Value**	**Species**
Maleic anhydride	108-31-6	oral	LD50	1,090 $^{mg}/_{kg}$	rat
Maleic anhydride	108-31-6	dermal	LD50	2,620 $^{mg}/_{kg}$	rabbit

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitisation
May cause an allergic skin reaction.

Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.

Carcinogenicity
Shall not be classified as carcinogenic.

Reproductive toxicity
Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure
Causes damage to organs (hearing organs) through prolonged or repeated exposure.

Hazard category	Target organ	Exposure route
1	hearing organs	if exposed

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties
Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

Endocrine disrupting chemicals (EDC)				
Name of substance	**CAS No**	**Human health category**	**Wildlife category**	**Reference decision**
styrene	100-42-5	CAT1	CAT3	EM 1999

Legend

CAT1	Category 1 - evidence of endocrine disruption in at least one species using intact animals
CAT3	Category 3 - no evidence of endocrine disruption or no data available

Other information
There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity
Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
styrene	100-42-5	LC50	10 mg/l	fish	96 h
styrene	100-42-5	EC50	3.32 mg/l	fish	96 h
styrene	100-42-5	ErC50	4.9 mg/l	algae	72 h
styrene	100-42-5	NOEC	4.1 mg/l	aquatic invertebrates	96 h
styrene	100-42-5	growth rate (Er-Cx) 10%	0.28 mg/l	algae	96 h
2,2'-(m-tolylimino)diethanol	91-99-6	LC50	>68.6 mg/l	zebra fish (Danio rerio)	96 h
2,2'-(m-tolylimino)diethanol	91-99-6	EC50	107 mg/l	daphnia magna	48 h
2,2'-(m-tolylimino)diethanol	91-99-6	NOEC	<100 mg/l	algae	72 h
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		LC50	>100 mg/l	fish	96 h
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		EC50	48 mg/l	aquatic invertebrates	48 h
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		ErC50	>100 mg/l	algae	72 h
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		NOEC	100 mg/l	algae	72 h
Maleic anhydride	108-31-6	LC50	75 mg/l	fish	96 h
Maleic anhydride	108-31-6	ErC50	74.35 mg/l	algae	72 h
Maleic anhydride	108-31-6	EC50	42.81 mg/l	daphnia magna	48 h
Maleic anhydride	108-31-6	NOEC	17.5 mg/l	daphnia magna	48 h
Maleic anhydride	108-31-6	LOEC	30.63 mg/l	daphnia magna	48 h
Maleic anhydride	108-31-6	growth rate (Er-Cx) 10%	11.8 mg/l	algae	72 h
Maleic anhydride	108-31-6	growth (EbCx) 10%	11.8 mg/l	algae	72 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
styrene	100-42-5	EC50	1.88 mg/l	aquatic invertebrates	21 d
styrene	100-42-5	LC50	>3.84 mg/l	aquatic invertebrates	21 d
styrene	100-42-5	NOEC	1.01 mg/l	aquatic invertebrates	21 d
styrene	100-42-5	LOEC	2.06 mg/l	aquatic invertebrates	21 d

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	**CAS No**	**Endpoint**	**Value**	**Species**	**Exposure time**
styrene	100-42-5	growth (EbCx) 20%	140 mg/l	microorganisms	30 min
2,2'-(m-tolylimino)diethanol	91-99-6	EC50	2,170 mg/l	microorganisms	3 h
2,2'-(m-tolylimino)diethanol	91-99-6	NOEC	100 mg/l	algae	72 h
2,2'-(m-tolylimino)diethanol	91-99-6	growth (EbCx) 10%	817 mg/l	microorganisms	3 h
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and Ethanol 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-		EC50	>1,000 mg/l	microorganisms	3 h
Maleic anhydride	108-31-6	EC50	77 mg/l	aquatic invertebrates	21 d
Maleic anhydride	108-31-6	NOEC	10 mg/l	aquatic invertebrates	21 d
Maleic anhydride	108-31-6	growth (EbCx) 10%	44.6 mg/l	microorganisms	18 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.

12.6 Endocrine disrupting properties

Contains an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

Endocrine disrupting chemicals (EDC)				
Name of substance	**CAS No**	**Human health category**	**Wildlife category**	**Reference decision**
styrene	100-42-5	CAT1	CAT3	EM 1999

Legend

CAT1	Category 1 - evidence of endocrine disruption in at least one species using intact animals
CAT3	Category 3 - no evidence of endocrine disruption or no data available

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste (Basel Convention)

Properties of waste which render it hazardous

H3	Flammable liquids
H11	Toxic (Delayed or chronic)

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

UN RTDG	UN 3269
IMDG-Code	UN 3269
ICAO-TI	UN 3269

14.2 UN proper shipping name

UN RTDG	POLYESTER RESIN KIT liquid base material
IMDG-Code	POLYESTER RESIN KIT liquid base material
ICAO-TI	Polyester resin kit liquid base material

14.3 Transport hazard class(es)

UN RTDG	3
IMDG-Code	3
ICAO-TI	3

14.4 Packing group

UN RTDG	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments

No data available.

Additional information for each of the UN Model Regulations

Transport information - national regulations - additional information (UN RTDG)

UN number	3269
Class	3
Packing group	III
Danger label(s)	3



Special provisions (SP)	236, 340 (UN RTDG)
Excepted quantities (EQ)	see SP 340 (UN RTDG)
Limited quantities (LQ)	5 L (UN RTDG)
Emergency Action Code	2YE

International Maritime Dangerous Goods Code (IMDG) - additional information

Marine pollutant	-
Danger label(s)	3



Special provisions (SP)	236, 340
Excepted quantities (EQ)	-> SP340
Limited quantities (LQ)	5 L
EmS	F-E, S-D
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Danger label(s)	3



Special provisions (SP)	A66, A163
Excepted quantities (EQ)	E0
Limited quantities (LQ)	5 kg

SECTION 15: Regulatory information

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

There is no additional information.
This Safety Data Sheet is purely informative and does comply with EU regulations, but not with country-specific regulations.

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	Restriction	No
Polyester putty - GAPOL	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
styrene	flammable / pyrophoric	R40	40
styrene	substances in tattoo inks and permanent make-up	R75	75
Maleic anhydride	substances in tattoo inks and permanent make-up	R75	75

Legend

R3 1. Shall not be used in:
- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ash-trays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
2. Articles not complying with paragraph 1 shall not be placed on the market.

Legend

3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
— can be used as fuel in decorative oil lamps for supply to the general public, and
— present an aspiration hazard and are labelled with H304.
4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
(a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: “Keep lamps filled with this liquid out of the reach of children”; and, by 1 December 2010, “Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage”;
(b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: ‘Just a sip of grill lighter fluid may lead to life threatening lung damage’;
(c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.’;

R40 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- ‘whoopee’ cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.
2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:
‘For professional users only’.
3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).
4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

R75 1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:
(a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
(b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
(c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
(d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
(i) 0,1 % by weight, if the substance is used solely as a pH regulator;
(ii) 0,01 % by weight, in all other cases;
(e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
(f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:
(i) “Rinse-off products”;
(ii) “Not to be used in products applied on mucous membranes”;
(iii) “Not to be used in eye products”;
(g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;
(h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
2. For the purposes of this entry use of a mixture “for tattooing purposes” means injection or introduction of the mixture into a person’s skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.
4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
(a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
(b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.
6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1

Legend

or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.
7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:
(a) the statement “Mixture for use in tattoos or permanent make-up”;
(b) a reference number to uniquely identify the batch;
(c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. “Ingredient” means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;
(d) the additional statement “pH regulator” for substances falling under point (d)(i) of paragraph 1;
(e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;
(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;
(g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.
The information shall be clearly visible, easily legible and marked in a way that is indelible.
The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.
Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.
Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.
8. Mixtures that do not contain the statement “Mixture for use in tattoos or permanent make-up” shall not be used for tattooing purposes.
9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).
10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

2012/18/EU (Seveso III)				
No	**Dangerous substance/hazard categories**	**Qualifying quantity (tonnes) for the application of lower and upper-tier requirements**		**Notes**
P5c	flammable liquids (cat. 2, 3)	5,000	50,000	51)

Notation

51) flammable liquids, categories 2 or 3 not covered by P5a and P5b

Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content	1.11 %

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	**Name acc. to inventory**	**CAS No**	**Listed in**	**Remarks**
styrene	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroido-		a)	

List of pollutants (WFD)				
Name of substance	**Name acc. to inventory**	**CAS No**	**Listed in**	**Remarks**
	genic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment			

Legend

a) Indicative list of the main pollutants

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (New Zealand)

New Zealand Inventory of Chemicals (NZIoC)

Group standard approval: HSR002662 - Surface Coatings and Colourants (Flammable) Group Standard 2020.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid

Abbr.	Descriptions of used abbreviations
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LOEC	Lowest Observed Effect Concentration
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity
Resp. Sens.	Respiratory sensitisation
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
SVHC	Substance of Very High Concern
UEL	Upper explosion limit (UEL)
UN RTDG	UN Recommendations on the Transport of Dangerous Good
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs (hearing organs) through prolonged or repeated exposure.
H373	May cause damage to organs (hearing organs) through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.