

## Safety Data Sheet

### MAPESEAL GC

Safety Data Sheet dated: 05/08/2025 - version 13

Date of first edition: 12/19/2017

## 1. IDENTIFICATION

### Product identifier

Mixture identification:

Trade name: MAPESEAL GC

Trade code: 9024386.UPY

### Recommended use of the chemical and restrictions on use

Recommended use: Sealant

Restrictions on use: Not available

### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: Polyglass U.S.A. Inc.

1111 West Newport Center Drive

33442 - Deerfield Beach - FL - USA

Phone: +1 866-222-9782

Responsible: RDProductSafety@mapei.com

### Emergency 24 hour numbers:

Emergency Number (USA/Canada) CHEMTREC 1(800) 424-9300 / 1(703) 527-3887 Emergency Transport CANUTEC (Canada) 1-613-996-6666

## 2. HAZARD(S) IDENTIFICATION



### Classification of the chemical

Flammable Liquids — Category 4

Skin Sensitization, Category 1A

Specific target organ toxicity following repeated exposure, Category 2

Combustible liquid

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

### Label elements

#### Hazard pictograms and Signal Word



Warning

### Hazard statements

H227 Combustible liquid

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

### Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P260 Do not breathe mist/vapours/spray.

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

P302+P352 IF ON SKIN: Wash with plenty of water.

P314 Get medical advice/attention if you feel unwell.

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

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.

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

P501 Dispose of contents/container in accordance with applicable regulations.

### Ingredient(s) with unknown acute toxicity:

None

## Hazards not otherwise classified identified during the classification process:

None

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substances

Not Relevant

### Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

#### List of components

Qty	Name	Ident. Numb.	Classification	Registration Number
2.5-5 %	coumarone-indene resins	CAS:63393-89-5 EC:613-209-2	Eye Irrit. 2A, H319	
1-2.5 %	naphtha (petroleum), aromatic; Heavy fractionated hydrocarbons	CAS:68603-08-7 EC:271-635-0	Flam. Liq. 4, H227; STOT SE 3, H336; STOT RE 2, H373; Asp. Tox. 1, H304	
1-2.5 %	vinyltrimethoxysilane; Trimethoxyvinylsilane	CAS:2768-02-7 EC:220-449-8 Index:014-049-00-0	Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Sens. 1B, H317	01-2119513215-52-XXXX
1-2.5 %	silica sand; quartz	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372; Carc. 1A, H350	
0.49-1 %	n-(2-aminoethyl)-3-aminopropylmethyldimethoxysilane; 1,2-Ethanediamine, N1-[3-(dimethoxymethylsilyl)propyl]-	CAS:3069-29-2 EC:221-336-6	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317	
0.1-0.25 %	bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate; Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester	CAS:41556-26-7 EC:255-437-1	Skin Sens. 1, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	

## 4. FIRST AID MEASURES

### Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.  
OBTAIN IMMEDIATE MEDICAL ATTENTION.  
Obtain medical attention if skin related symptoms persist.  
Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.  
In case of inhalation, consult a doctor immediately and show him packing or label.

### Most important symptoms/effects, acute and delayed

Not available

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.

#### **Unsuitable extinguishing media:**

None in particular.

#### **Specific hazards arising from the chemical**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: Not available

Explosive properties: Not available

Oxidizing properties: Not available

#### **Special protective equipment and precautions for fire-fighters**

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

### **Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

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## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

### **Conditions for safe storage, including any incompatibilities**

Data not available.

Always keep in a well ventilated place.

Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Store in a well-ventilated place. Keep cool.

Avoid direct exposure to sunlight.

Opened containers must be carefully resealed and kept upright to prevent leakage.

Flammable mixtures may accumulate within the headspace of containers at room temperature.

Storage at higher temperatures requires an appropriate evaluation of preventive and protection measures to be adopted.

Storage temperature must be defined on the basis of a proper risk evaluation. Refer to other sections for additional information.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

Storage temperature: Not available

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## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

#### **Community Occupational Exposure Limits (OEL)**

	<b>OEL Type</b>	<b>Country</b>	<b>Occupational Exposure Limit</b>
silica sand; quartz CAS: 14808-60-7	ACGIH		Long Term: 0.025 mg/m3 A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis

MAK	AUSTRIA	Long Term: 0.15 mg/m3
ACGIH		Long Term: 0.025 mg/m3 (R), A2 - Pulm fibrosis, lung cancer
MAK	SWITZERLAND	Long Term: 0.15 mg/m3
EU		Long Term: 0.1 mg/m3 Behaviour Binding

#### Predicted No Effect Concentration (PNEC) values

vinyltrimethoxysilane; Trimethoxyvinylsilane CAS: 2768-02-7	Exposure Route: Fresh Water; PNEC Limit: 0.34 mg/l
	Exposure Route: Marine water; PNEC Limit: 0.034 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 1.24 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 0.12 mg/kg
	Exposure Route: Intermittent release; PNEC Limit: 3.4 mg/l
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate; Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester CAS: 41556-26-7	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1 mg/l
	Exposure Route: Soil; PNEC Limit: 0.21 mg/kg
	Exposure Route: Intermittent release; PNEC Limit: 0.009 mg/l
	Exposure Route: Fresh Water; PNEC Limit: 0.0022 mg/l
	Exposure Route: Marine water; PNEC Limit: 0.000022 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 1.05 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 0.11 mg/kg

#### Derived No Effect Level (DNEL) values

vinyltrimethoxysilane; Trimethoxyvinylsilane CAS: 2768-02-7	Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Industry: 0.69 mg/kg; Consumer: 0.3 mg/kg
	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Worker Industry: 4.9 mg/m3; Consumer: 1.04 mg/m3
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate; Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester CAS: 41556-26-7	Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects Worker Industry: 2.5 mg/kg
	Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Industry: 2.5 mg/kg
	Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects Worker Industry: 2.35 mg/m3
	Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects Worker Industry: 2.35 mg/m3
	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Worker Industry: 2.35 mg/m3
	Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects Consumer: 1.25 mg/kg
	Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects Consumer: 1.25 mg/kg
	Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects Consumer: 0.58 mg/m3
	Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects Consumer: 0.58 mg/m3

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 1.25 mg/kg

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Consumer: 1.25 mg/kg

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects  
Consumer: 0.58 mg/m<sup>3</sup>

Appropriate engineering controls: Not available

#### **Individual protection measures**

Eye protection:

Use close fitting safety goggles, don't use contact lenses.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; 29 CFR 1910.138 - ANSI/ISEA 105:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Butyl rubber - IIR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Fluorinated rubber - FKM: thickness  $\geq 0,4\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Use impervious gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to 29 CFR 1910.134 - CSA Z94.4 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

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## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

Physical state: Liquid

Appearance and colour: paste green

Odour: almost odorless

Odour threshold: No data available

pH: No data available

Melting point / freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: 62 °C (144 °F)

Evaporation rate: No data available

Upper/lower flammability or explosive limits: No data available

Vapour density: No data available

Vapour pressure: No data available

Relative density: 1.25 g/cm<sup>3</sup>

Solubility in water: insoluble

Solubility in oil: dispersible

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Solid/gas flammability: No data available

### **Other information**

Substance Groups relevant properties No data available

Miscibility: No data available

Fat Solubility: No data available

Conductivity: No data available

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## **10. STABILITY AND REACTIVITY**

### **Reactivity**

No data available

### **Chemical stability**

Data not available.

### **Possibility of hazardous reactions**

None.

**Conditions to avoid**

No data available

**Incompatible materials**

Data not available.

**Hazardous decomposition products**

Data not available.

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**11. TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Toxicological Information of the Preparation**

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	The product is classified: Skin Sensitization, Category 1A(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	The product is classified: Specific target organ toxicity following repeated exposure, Category 2(H373)
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

**Toxicological information on main components of the mixture:**

vinyltrimethoxysilane; Trimethoxyvinylsilane	a) acute toxicity	LD50 Oral Rat = 6899 mg/kg
		LD50 Skin Rat = 3158 mg/kg
		LC50 Inhalation Vapour Rat = 16.8 mg/l 4h
silica sand; quartz	a) acute toxicity	LD50 Oral > 2000 mg/kg
		LD50 Skin > 2000 mg/kg
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate; Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyloxy) ester	a) acute toxicity	LD50 Oral Rat = 2615 mg/kg

**Substance(s) listed on the IARC Monographs:**

silica sand; quartz                      Group 1

**Substance(s) listed as OSHA Carcinogen(s):**

silica sand; quartz

**Substance(s) listed as NIOSH Carcinogen(s):**

silica sand; quartz

**Substance(s) listed on the NTP report on Carcinogens:**

silica sand; quartz

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## 12. ECOLOGICAL INFORMATION

### Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

### List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

Based on available data, the classification criteria are not met

### List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
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bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate; Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidiny) ester	CAS: 41556-26-7 - EINECS: 255-437-1	a) Aquatic acute toxicity : EC50 Daphnia = 20 mg/L 24h
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a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 0.97 mg/L 96h

### Persistence and degradability

N.A.

### Bioaccumulative potential

N.A.

### Mobility in soil

N.A.

### Other adverse effects

N.A.

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## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

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## 14. TRANSPORT INFORMATION

### UN number

DOT-UN Number: NA1993

ADR-UN number: NA1993

IATA-Un number: -

IMDG-Un number: -

### UN proper shipping name

DOT-Proper Shipping Name: Combustible liquid, n.o.s.

ADR-Shipping Name: -

IATA-Technical name: -

IMDG-Technical name: -

### Transport hazard class(es)

DOT-Hazard Class: Comb liq

ADR-Class: -

IATA-Class: -

IMDG-Class: -

#### **Packing group**

DOT Packing Group: III

ADR-Packing Group: -

IATA-Packing group: -

IMDG-Packing group: -

#### **Environmental hazards**

Marine pollutant: No

Environmental Pollutant: Not Applicable

DOT-RQ: No

#### **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not Applicable

#### **Special precautions**

Department of Transportation (DOT):

DOT-Special Provision(s): 148, IB3, T1, TP1

DOT-Label(s): -

DOT-Symbol: N/A

DOT-Cargo Aircraft: N/A

DOT-Passenger Aircraft: N/A

DOT-Bulk: N/A

DOT-Non-Bulk: N/A

DOT-Limited Quantity threshold: N/A

Road and Rail ( ADR-RID ) :

ADR-Label: -

ADR-Hazard identification number: -

ADR-Transport category (Tunnel restriction code): -

Air ( IATA ) :

IATA-Passenger Aircraft: -

IATA-Cargo Aircraft: -

IATA-Label: -

IATA-Subsidiary hazards: -

IATA-Erg: -

IATA-Special Provisioning: -

Sea ( IMDG ) :

IMDG-Stowage Code: -

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: -

IMDG-EMS: -

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## **15. REGULATORY INFORMATION**

### **USA - Federal regulations**

#### **TSCA - Toxic Substances Control Act**

All the components are listed on the TSCA inventory

##### **TSCA listed substances:**

coumarone-indene resins is listed in TSCA Section 8b

naphtha (petroleum), aromatic; is listed in TSCA Section 8b

Heavy fractionated hydrocarbons



vinyltrimethoxysilane; Trimethoxyvinylsilane	is listed in TSCA Section 8b
silica sand; quartz	is listed in TSCA Section 8b
n-(2-aminoethyl)-3-aminopropylmethyldimethoxysilane; 1,2-Ethanediamine, N1-[3-(dimethoxymethylsilyl)propyl]-	is listed in TSCA Section 8b
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate; Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester	is listed in TSCA Section 8b

#### **SARA - Superfund Amendments and Reauthorization Act**

##### **Section 302 - Extremely Hazardous Substances:**

No substances listed

##### **Section 304 - Hazardous substances:**

No substances listed

##### **Section 313 - Toxic chemical list:**

No substances listed

#### **CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**

##### **Substance(s) listed under CERCLA:**

No substances listed

#### **CAA - Clean Air Act**

##### **CAA listed substances:**

No substances listed

#### **CWA - Clean Water Act**

##### **CWA listed substances:**

No substances listed

#### **USA - State specific regulations**

##### **California Proposition 65**

##### **Substance(s) listed under California Proposition 65:**

silica sand; quartz	Listed as carcinogen
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##### **Massachusetts Right to know**

##### **Substance(s) listed under Massachusetts Right to know:**

silica sand; quartz

##### **Pennsylvania Right to know**

##### **Substance(s) listed under Pennsylvania Right to know:**

silica sand; quartz

##### **New Jersey Right to know**

##### **Substance(s) listed under New Jersey Right to know:**

silica sand; quartz

#### **Canada - Federal regulations**

##### **DSL - Domestic Substances List**

All the substances are listed in the DSL.

##### **NDSL - Non Domestic Substances List**

This product complies with NDSL inventory

##### **NPRI - National Pollutant Release Inventory**

##### **NPRI (National Pollutant Release Inventory) - List of substances listed.**

No substances listed

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## **16. OTHER INFORMATION**

Safety Data Sheet dated: 5/8/2025 - version 13

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.  
This SDS cancels and replaces any preceding release.

<b>Code</b>	<b>Description</b>
H226	Flammable liquid and vapour.
H227	Combustible liquid
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure in contact with skin.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

<b>Code</b>	<b>Hazard class and hazard category</b>	<b>Description</b>
A.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
A.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
A.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
A.2/2	Skin Irrit. 2	Skin irritation, Category 2
A.3/1	Eye Dam. 1	Serious eye damage, Category 1
A.3/2A	Eye Irrit. 2A	Eye irritation, Category 2A
A.4.2/1	Skin Sens. 1	Skin Sensitization, Category 1
A.4.2/1A	Skin Sens. 1A	Skin Sensitization, Category 1A
A.4.2/1B	Skin Sens. 1B	Skin Sensitization, Category 1B
A.6/1A	Carc. 1A	Carcinogenicity, Category 1A
A.8/3	STOT SE 3	Specific target organ toxicity following single exposure, Category 3
A.9/1	STOT RE 1	Specific target organ toxicity following repeated exposure, Category 1
A.9/2	STOT RE 2	Specific target organ toxicity following repeated exposure, Category 2
B.6/3	Flam. Liq. 3	Flammable Liquids — Category 3
B.6/4	Flam. Liq. 4	Flammable Liquids — Category 4
US-HAE/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
US-HAE/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1

#### **Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
 IMDG: International Maritime Code for Dangerous Goods.  
 IATA: International Air Transport Association.  
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
 ICAO: International Civil Aviation Organization.  
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
 CLP: Classification, Labeling, Packaging.  
 EINECS: European Inventory of Existing Commercial Chemical Substances.  
 INCI: International Nomenclature of Cosmetic Ingredients.  
 CAS: Chemical Abstracts Service (division of the American Chemical Society).  
 GefStoffVO: Ordinance on Hazardous Substances, Germany.  
 LC50: Lethal concentration, for 50 percent of test population.  
 LD50: Lethal dose, for 50 percent of test population.  
 DNEL: Derived No Effect Level.  
 PNEC: Predicted No Effect Concentration.  
 TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

**Paragraphs modified from the previous revision:**

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 6. ACCIDENTAL RELEASE MEASURES
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 10. STABILITY AND REACTIVITY
- 14. TRANSPORT INFORMATION