Safety Data Sheet
PLANISEAL CR1
Safety Data Sheet dated: 10/24/2023 - version 11
Date of first edition: 12/19/2017

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: PLANISEAL CR1

Trade code: 9024386

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: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Phone: 954-246-8888

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 3	Flammable liquid and vapour.
Skin Sensitization, Category 1	May cause an allergic skin reaction.
Specific target organ toxicity following repeated exposure, Category 2	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

H226	Flammable liquid and vapour.
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

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe vapours.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing must not be allowed out of the workplace.

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/shower.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see supplementary instructions on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it 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.
P405	Store locked up.
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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

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.

7. HANDLING AND STORAGE

Precautions for safe handling

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

Exercise the greatest care when handling or opening the container.

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.
Avoid accumulating electrostatic charge.
Keep away from food, drink and feed.
Electrical installations / working materials must comply with the technological safety standards.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.
Safety electric system.

Storage temperature: Not available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
silica sand; quartz CAS: 14808-60-7	ACGIH		Long Term: 0.025 mg/m3 A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;
	ACGIH		Long Term: 0.025 mg/m3 A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	MAK	AUSTRIA	Long Term: 0.15 mg/m3
	MAK	SWITZERLAND	Long Term: 0.15 mg/m3

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-piperidinyl) 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	Exposure Route: Human Dermal; Exposure Frequency: Short Term, systemic effects Worker Industry: 2.5 mg/kg

acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester
CAS: 41556-26-7

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/m3

Appropriate engineering controls: Not available

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

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 >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

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.

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: 60 °C (140 °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/cm3
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

10. STABILITY AND REACTIVITY

Reactivity

No data available
It may generate dangerous reactions (See subsections below)

Chemical stability

It may generate dangerous reactions (See subsections below)

Possibility of hazardous reactions

None.

Conditions to avoid

No data available
Avoid accumulating electrostatic charge.

Incompatible materials

Data not available.
Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products

Data not available.

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 1(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; a) acute toxicity LD50 Oral Rat = 6899 mg/kg

Trimethoxyvinylsilane		
		LD50 Skin Rat = 3158 mg/kg LC50 Inhalation Vapour Rat = 16.8 mg/l 4h
silica sand; quartz	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate; Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) 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

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
silica sand; quartz	CAS: 14808-60-7 - EINECS: 238-878-4	a) Aquatic acute toxicity : LC50 carp > 10000 mg/L 72h
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 - EINECS: 255-437-1	a) Aquatic acute toxicity : EC50 Daphnia = 20 mg/L 24h
		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.

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.

14. TRANSPORT INFORMATION

UN number

DOT-UN Number: NA1993

ADR-UN number: 1993

IATA-Un number: 1993

IMDG-Un number: 1993

UN proper shipping name

DOT-Proper Shipping Name: Combustible liquid, n.o.s. (aromatic hydrocarbons - trimethoxyvinylsilane)

(Not regulated for US DOT if shipped by road in non-bulk containers of 119 gallons or less)

ADR-Shipping Name: FLAMMABLE LIQUID, N.O.S. (aromatic hydrocarbons - trimethoxyvinylsilane)

IATA-Technical name: FLAMMABLE LIQUID, N.O.S. (aromatic hydrocarbons - trimethoxyvinylsilane)

IMDG-Technical name: FLAMMABLE LIQUID, N.O.S. (aromatic hydrocarbons - trimethoxyvinylsilane)

Transport hazard class(es)

DOT-Hazard Class: COMBUSTIBLE

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

Packing group

DOT Packing Group: III

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

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): NONE

DOT-Symbol: D G

DOT-Cargo Aircraft: 220 L

DOT-Passenger Aircraft: 60 L

DOT-Bulk: 242

DOT-Non-Bulk: 203

Road and Rail (ADR-RID) :

ADR-Label: 3

ADR-Hazard identification number: 30

ADR-Transport category (Tunnel restriction code): 3 (D/E)

Air (IATA) :

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisioning: A3

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 223 274 955

IMDG-EMS: F-E, [S-E]

Pursuant to 49 CFR 173.120(b)(2) and 49 CFR 173.150(f) a flammable liquid with a flash point at or above 100 degrees Fahrenheit may be reclassed as a combustible liquid for transportation within the U.S. by motor vehicle or rail only.

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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; Heavy fractionated hydrocarbons	is listed in TSCA	Section 8b
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

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

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Additional classification information

NFPA Health: 1 = Slight
NFPA Flammability: 2 = Combustible liquid
NFPA Reactivity: 0 = Minimal
NFPA Special Risk: N.A.

NFPA

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.

Code	Description
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.

Code	Hazard class and hazard category	Description
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:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 10. STABILITY AND REACTIVITY
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION