

## Safety Data Sheet

### POLYPLUS 50

Safety Data Sheet dated: 05/15/2023 - version 3

Date of first edition: 06/29/2021

## 1. Identification

### Product identifier

Mixture identification:

Trade name: POLYPLUS 50

Trade code: PLY0061

### Recommended use and restrictions on use

Recommended use: Sealant

Restrictions on use: Not available

### Supplier's details

Company: Polyglass U.S.A. Inc.

1111 West Newport Center Drive

33442 - Deerfield Beach - FL - USA

Phone: +1 866-222-9782

Responsible: Not available

### Emergency phone number

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

## 2. Hazard identification



### Classification of the product

Flammable Liquids — Category 3

Germ cell mutagenicity, Category 1B

Carcinogenicity, Category 1A

Specific target organ toxicity following repeated exposure, Category 1

Acute (short-term) aquatic hazard - Category 3

Chronic (long-term) aquatic hazard - Category 3

Flammable liquid and vapour.

May cause genetic defects if inhaled, in contact with skin and if swallowed.

May cause cancer if inhaled, in contact with skin and if swallowed.

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

Harmful to aquatic life

Harmful to aquatic life with long lasting effects.

### Label elements

#### Pictograms and Signal Words



Danger

### Hazard statements

H226 Flammable liquid and vapour.

H340 May cause genetic defects if inhaled, in contact with skin and if swallowed.

H350 May cause cancer if inhaled, in contact with skin and if swallowed.

H372 Causes damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

H402 Harmful to aquatic life

H412 Harmful to aquatic life with long lasting effects.

### 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe vapours.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
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.
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.

#### Other hazards

None

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

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 WHMIS 2015 and related classification:

#### List of components

Qty	Name	Ident. Numb.	Classification	Registration Number
25-50 %	petroleum hydrocarbons; Stoddard Solvent	CAS:8052-41-3 EC:232-489-3 Index:649-345-00-4	Flam. Liq. 3, H226; STOT RE 1, H372; Asp. Tox. 1, H304; Muta. 1B, H340; Carc. 1B, H350	
10-20 %	asphalt; bitumen	CAS:8052-42-4 EC:232-490-9	Carc. 2, H351	
1-2.5 %	naphthenic oil; Low boiling point naphtha - unspecified	CAS:64742-95-6 EC:265-199-0 Index:649-356-00-4	Asp. Tox. 1, H304; Flam. Liq. 3, H226; Carc. 1B, H350	
0.25-0.49 %	silica sand; quartz	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372; Carc. 1A, H350	

The actual concentration of the components listed above is withheld as a trade secret.

### 4. First-aid measures

#### Description of necessary first-aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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 the packaging or label.

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

Not available

#### **Indication of immediate medical attention and special treatment needed, if necessary**

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)

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## **5. Fire-fighting measures**

### **Suitable and unsuitable extinguishing media**

Suitable extinguishing media:

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

CO<sub>2</sub> or Dry chemical fire extinguisher.

Unsuitable extinguishing media:

None in particular.

### **Specific hazards arising from the hazardous product**

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.

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.

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## **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.

Wash skin thoroughly after handling.

See also section 8 for recommended protective equipment.

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

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

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## 8. Exposure controls/personal protection

### Control parameters

#### Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
petroleum hydrocarbons; Stoddard Solvent CAS: 8052-41-3	OSHA		Long Term: 2900 mg/m <sup>3</sup> - 500 ppm
	ACGIH		Long Term: 100 ppm CNS impairment;eye, kidney and skin damage;nausea;
	ACGIH		Long Term: 100 ppm CNS impairment;eye, kidney and skin damage;nausea
asphalt; bitumen CAS: 8052-42-4	ACGIH		Long Term: 0.5 mg/m <sup>3</sup> A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free);eye and upper respiratory tract irritation (fume);
	MAK	GERMANY	Long Term: 1.5 mg/m <sup>3</sup>
	ACGIH		Long Term: 0.5 mg/m <sup>3</sup> A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free);eye and upper respiratory tract irritation (fume)
	MAK	SWITZERLAN D	Long Term: 10 mg/m <sup>3</sup>
silica sand; quartz CAS: 14808-60-7	ACGIH		Long Term: 0.025 mg/m <sup>3</sup> A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;
	ACGIH		Long Term: 0.025 mg/m <sup>3</sup> A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	MAK	AUSTRIA	Long Term: 0.15 mg/m <sup>3</sup>
	MAK	SWITZERLAN D	Long Term: 0.15 mg/m <sup>3</sup>

### Biological limit values

asphalt; bitumen  
CAS: 8052-42-4  
Biological Indicator: 1-Hydroxypyrene; Sampling Period: End of turn; End of working week  
Medium: Urine  
Remark: Not Quantitative

Biological Indicator: 1-Hydroxypyrene; Sampling Period: End of turn; End of working week  
Value: 2.5 µg/L; Medium: Urine  
Remark: Background

Biological Indicator: 3-Hydroxybenzo(a)pyrene with hydrolysis; Sampling Period: End of turn; End of working week  
Medium: Urine  
Remark: Not Quantitative

### Appropriate engineering controls

Not available

### Individual protection measures, such as personal protective equipment (PPE)

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  $\geq 0,5\text{mm}$ ; 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 Black

Odour: hydrocarbons like

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: 40.5 °C (104.9 °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: 1.02 g/cm<sup>3</sup>

Solubility in water: Insoluble

Solubility in oil: No data available

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

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

Avoid accumulating electrostatic charge.

### Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

### Hazardous decomposition products

None.

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## 11. Toxicological information

### Information on toxicological effects

Likely routes of exposure:

Skin contact, skin absorption, eye contact, inhalation and ingestion.

## 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	Not classified Based on available data, the classification criteria are not met
e) germ cell mutagenicity	The product is classified: Germ cell mutagenicity, Category 1B(H340)
f) carcinogenicity	The product is classified: Carcinogenicity, Category 1A(H350)
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 1(H372)
j) aspiration hazard	Not classified Based on available data, the classification criteria are not met

## Toxicological information on main components of the mixture:

petroleum hydrocarbons; Stoddard Solvent	a) acute toxicity	LD50 Skin Rabbit > 3000 mg/kg  LC50 Inhalation Rat > 5.5 mg/l 4h
asphalt; bitumen	a) acute toxicity	LD50 Skin Rabbit > 2000 mg/kg LD50 Oral Rat > 5000 mg/kg LC50 Inhalation Rat > 94.4 mg/m <sup>3</sup> 4.5h LD50 Oral Rat > 5000 mg/kg
naphthenic oil; Low boiling point naphtha - unspecified	a) acute toxicity	LD50 Skin Rabbit > 2000 mg/kg  LC50 Inhalation Rat = 3400 ppm 4h LD50 Oral Rat = 8400 mg/kg
silica sand; quartz	a) acute toxicity	LD50 Oral Rat = 500 mg/kg

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

asphalt; bitumen	Group 2B
silica sand; quartz	Group 1

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

asphalt; bitumen  
silica sand; quartz

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

asphalt; bitumen  
silica sand; quartz

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

silica sand; quartz

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## 12. Ecological information

### Ecotoxicity

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

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

The product is classified: Acute (short-term) aquatic hazard - Category 3(H402), Chronic (long-term) aquatic hazard - Category 3(H412)

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

Component	Ident. Numb.	Ecotox Data
naphthenic oil; Low boiling point naphtha - unspecified	CAS: 64742-95-6 - EINECS: 265-199-0 - INDEX: 649-356-00-4	G : LC50 Avian Colinus virginianus > 6500 ppm 5d IUCLID  G : LD50 Avian Colinus virginianus > 2250 mg/kg IUCLID a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 9.22 mg/L 96h IUCLID  a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 6.14 mg/L 48h IUCLID
silica sand; quartz	CAS: 14808-60-7 - EINECS: 238-878-4	a) Aquatic acute toxicity : LC50 carp > 10000 mg/L 72h

### 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

### Safe handling and methods for disposal

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

TDG-UN number: NA1993

ADR-UN number: 1993

DOT-UN Number: NA1993

IATA-Un number: 1993

IMDG-Un number: 1993

### UN proper shipping name

TDG-Shipping Name: FLAMMABLE LIQUID, N.O.S. (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C more than 110 kPa, boiling point of more than 35 °C) (petroleum hydrocarbons; Stoddard Solvent - naphthenic oil; Low boiling point naphtha - unspecified)

ADR-Shipping Name: FLAMMABLE LIQUID, N.O.S. (having a flash-point below 23 °C and viscous according to 2.2.3.1.4) (vapour pressure at 50 °C more than 110 kPa, boiling point of more than 35 °C) (petroleum hydrocarbons; Stoddard

Solvent - naphthenic oil; Low boiling point naphtha - unspecified)

DOT-Proper Shipping Name: COMBUSTIBLE LIQUID, N.O.S. (petroleum hydrocarbons; Stoddard Solvent - naphthenic oil; Low boiling point naphtha - unspecified)

IATA-Technical name: FLAMMABLE LIQUID, N.O.S. (petroleum hydrocarbons; Stoddard Solvent - naphthenic oil; Low boiling point naphtha - unspecified)

IMDG-Technical name: FLAMMABLE LIQUID, N.O.S. (petroleum hydrocarbons; Stoddard Solvent - naphthenic oil; Low boiling point naphtha - unspecified)

**Transport hazard class(es)**

TDG-Class: COMBUSTIBLE

ADR-Class: 3

DOT-Hazard Class: COMBUSTIBLE

IATA-Class: 3

IMDG-Class: 3

**Packing group**

TDG-Packing Group: III

ADR-Packing Group: III

DOT 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 MARPOL 73/78 and the IBC Code)**

Not Applicable

**Special precautions in connection with transport or conveyance**

TDG:

TDG Special provisions: N/A

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: 241

DOT-Non-Bulk: 203

Road and Rail (ADR-RID):

ADR-Label: 3

ADR-Hazard identification number: -

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

Air (IATA):

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 223 274 955

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-E, S-E

IMDG-MFAG: N/A

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 reclassified as a combustible liquid for transportation within the U.S. by motor vehicle or rail only.



## 15. Regulatory information

### Canada - Federal regulations

#### DSL - Domestic Substances List

##### DSL (Domestic Substances List)

All the substances are listed in the DSL.

#### NDSL - Non Domestic Substances List

##### NDSL (Non Domestic Substances List)

No substances listed

#### NPRI - National Pollutant Release Inventory

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

No substances listed

### USA - Federal regulations

#### TSCA - Toxic Substances Control Act

##### TSCA inventory:

All the components are listed on the TSCA inventory

##### TSCA listed substances:

petroleum hydrocarbons; Stoddard is listed in TSCA Section 8b Solvent

asphalt; bitumen is listed in TSCA Section 8b

naphthenic oil; Low boiling point is listed in TSCA Section 8b naphtha - unspecified

silica sand; quartz 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:

petroleum hydrocarbons; Stoddard Solvent

asphalt; bitumen

silica sand; quartz

#### Pennsylvania Right to know

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

petroleum hydrocarbons; Stoddard Solvent

asphalt; bitumen

silica sand; quartz

#### New Jersey Right to know

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

petroleum hydrocarbons; Stoddard Solvent

asphalt; bitumen  
silica sand; quartz

## 16. Other information

Safety Data Sheet dated: 5/15/2023 - version 3

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.
H304	May be fatal if swallowed and enters airways.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.

Code	Hazard class and hazard category	Description
A.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
A.5/1B	Muta. 1B	Germ cell mutagenicity, Category 1B
A.6/1A	Carc. 1A	Carcinogenicity, Category 1A
A.6/1B	Carc. 1B	Carcinogenicity, Category 1B
A.6/2	Carc. 2	Carcinogenicity, Category 2
A.9/1	STOT RE 1	Specific target organ toxicity following repeated exposure, Category 1
B.6/3	Flam. Liq. 3	Flammable Liquids — Category 3

### 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
- 4. FIRST AID MEASURES
- 5. FIRE-FIGHTING MEASURES
- 7. HANDLING AND STORAGE

- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION