

## Safety Data Sheet

### PRIMER E PART B

Safety Data Sheet dated: 06/10/2021 - version 3

Date of first edition: 03/23/2017



## 1. Identification

### Product identifier

Mixture identification:

Trade name: PRIMER E PART B

Other means of identification

Trade code: 2734

### Recommended use and restrictions on use

Recommended use: Primer

Restrictions on use: N.A.

### Supplier's details

Company: MAPEI INC. (Canada)

2900 Francis-Hughes Avenue

H7L 3J5 - Laval - QC - CAN

### 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

Harmful if swallowed.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

Suspected of causing genetic defects in contact with skin.

Suspected of damaging fertility. Suspected of damaging the unborn child.

May cause damage to organs in contact with skin.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

### Label elements

#### Pictograms and Signal Words



Danger

### Hazard statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects in contact with skin.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H371 May cause damage to organs in contact with skin.

H400 Very toxic to aquatic life.

H410 Very toxic 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.

P260 Do not breathe mist/vapours/spray.

P264 Wash skin thoroughly after handling.

P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER.
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.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regulations.

#### Other hazards

None

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

None

### 3. Composition/information on ingredients

#### Substances

N.A.

#### Mixtures

Hazardous components within the meaning of WHMIS 2015 and related classification:

#### List of components

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
25-50 %	4-NONYLPHENOL, BRANCHED	CAS:84852-15-3 EC:284-325-5 Index:601-053-00-8	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Repr. 2, H361	N.A.
20-25 %	Triethylene tetramine	CAS:112-24-3	Skin Sens. 1, H317; Aquatic Chronic 3, H412; Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314	
1-2.5 %	2,4,6-Tri(dimethylaminomethyl)phenol	CAS:90-72-2	Skin Corr. 1B, H314; Skin Sens. 1A, H317; Aquatic Chronic 3, H412	
1-2.5 %	N,N'-DIMETHYLPROPANE-1,3-DIAMINE	CAS:111-33-1	Flam. Liq. 2, H225; Skin Corr. 1B, H314; Eye Dam. 1, H318	
1-2.5 %	TETRAETHYLENEPENTAMINE	CAS:112-57-2	Skin Sens. 1, H317; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314	

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.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Give nothing to eat or drink.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

**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:

Water.

Carbon dioxide (CO<sub>2</sub>).

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: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

### **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 persons to safety.

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.

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**

Storage temperature: N.A.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

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## 8. Exposure controls/personal protection

### Control parameters

No data available

### Appropriate engineering controls

N.A.

### 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: Yellow

Odour: Like: Amines

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: 94 °C (201 °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: 0.97 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

Stable under normal conditions

### Chemical stability

Data not available.

### Possibility of hazardous reactions

None.

**Conditions to avoid**

Stable under normal conditions.

**Incompatible materials**

None in particular.

**Hazardous decomposition products**

None.

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**11. Toxicological information****Information on toxicological effects****Toxicological information of the mixture:**

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

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

4-NONYLPHENOL, BRANCHED	a) acute toxicity	LD50 Oral Rat 1300 mg/kg
		LD50 Skin Rabbit > 2000 mg/kg
		LD50 Skin Rabbit = 2000 mg/kg
		LD50 Oral Rat = 1300 mg/kg
Triethylene tetramine	a) acute toxicity	LD50 Skin Rabbit = 550 mg/kg
		LD50 Oral Rat = 2500 mg/kg
		LD50 Skin Rabbit = 550 mg/kg
		LD50 Oral Rat = 2500 mg/kg
2,4,6- Tri(dimethylaminomethyl) phenol	a) acute toxicity	LD50 Skin Rat = 1280 mg/kg
		LD50 Oral Rat = 1000 mg/kg
		LD50 Skin Rat = 1280 mg/kg
		LD50 Oral Rat = 1200 mg/kg
TETRAETHYLENEPENTAMI NE	a) acute toxicity	LD50 Skin Rabbit = 660 µL/kg
		LD50 Oral Rat = 2100 mg/kg
		LD50 Skin Rabbit = 660 µL/kg
		LD50 Oral Rat = 3990 mg/kg

**If not differently specified, the information required in the regulation and listed below must be considered as N.A.**

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

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

None

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

None

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

None

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

None

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**12. Ecological information**

**Ecotoxicity**

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

**List of components with eco-toxicological properties**

Component	Ident. Numb.	Ecotox Infos
4-NONYLPHENOL, BRANCHED	CAS: 84852-15-3 - EINECS: 284-325-5 - INDEX: 601-053- 00-8	LC50 Fish Pimephales promelas 0,135 mg/L 96h „Holcombe, G.W., Phipps, G.L., Knuth, M.L. and Felhaber, T. (1984) Environ. Pollut. (Series A) 35, 367-381  LC100 Fish Leuciscus idus 1,1 mg/L 48h „Huels study, 1988 (unpublished) LC50 Fish Leuciscus idus 0,95 mg/L 48h „Huels study, 1988 (unpublished) LOEC Fish Pimephales promelas 14 µg/L 33d „Chemical Manufacturers Association (1991) Two environmental effects 4-Nonylphenol final reports 1. Chronic toxicity of Nonylphenol to the Mysid, Mysidopsis bahia: EnviroSystems Study Number 8977-CMA 2. Early life stage toxicity of Nonylphenol to the fath  NOEC Fish Pimephales promelas 7,4 µg/L 33d „Chemical Manufacturers Association (1991) Two environmental effects 4-Nonylphenol final reports 1. Chronic toxicity of Nonylphenol to the Mysid, Mysidopsis bahia: EnviroSystems Study Number 8977-CMA 2. Early life stage toxicity of Nonylphenol to the fath  EC100 Daphnia Daphnia magna > 400 µg/L 48h „Huels report No. DK-522, 1992 (unpublished)  EC0 Daphnia Daphnia magna < 100 µg/L 48h „Huels report No. DK-522, 1992 (unpublished)  EC50 Daphnia Daphnia magna 140 µg/L 48h „Huels report No. DK-522, 1992 (unpublished)  LOEC Daphnia Daphnia magna > 100 µg/L 21d „Huels report No. DL-143, 1992 (unpublished)  NOEC Daphnia Daphnia magna 0,024 mg/L 21d ICI PLC (1991) Nonyl Phenol: Chronic Toxicity to Daphnia Magna Report No: BLS1319/B (Interim) BL4176/B (Final)  EC90 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 3,2 mg/L 72h Huels study (unpublished)  EC10 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 0,5 mg/L 72h Huels study (unpublished)  EC50 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 1,3 mg/L 72h Huels study (unpublished)  a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 0,135 mg/L 96h IUCLID  a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 0,1351 mg/L 96h EPA  a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 0,14 mg/L 48h IUCLID  a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 0,36 mg/L 96h EPA  a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 0,16 mg/L 72h EPA  a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 1,3 mg/L 72h IUCLID
Triethylene tetramine	CAS: 112-24-3	a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 570 mg/L 96h IUCLID

		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 495 mg/L 96h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 2,50000 mg/L 72h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 20 mg/L 72h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 3,70000 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 31,1 mg/L 48h IUCLID
TETRAETHYLENEPENTAMINE	CAS: 112-57-2	a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 420 mg/L 96h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 24,1 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 2,1 mg/L 72h IUCLID

#### Persistence and degradability

N.A.

#### Bioaccumulative potential

N.A.

#### Mobility in soil

N.A.

#### Other adverse effects

N.A.

### 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.

### 14. Transport information

#### UN number

TDG-UN number: UN1760

ADR-UN number: 1760

DOT-UN Number: UN1760

IATA-Un number: 1760

IMDG-Un number: 1760

#### UN proper shipping name

TDG-Shipping Name: CORROSIVE LIQUID, N.O.S. (4-NONYLPHENOL, BRANCHED - Triethylene tetramine)

ADR-Shipping Name: CORROSIVE LIQUID, N.O.S. (4-NONYLPHENOL, BRANCHED - Triethylene tetramine)

DOT-Proper Shipping Name: Corrosive liquids, n.o.s. (4-NONYLPHENOL, BRANCHED - Triethylene tetramine)

IATA-Technical name: CORROSIVE LIQUID, N.O.S. (4-NONYLPHENOL, BRANCHED - Triethylene tetramine)

IMDG-Technical name: CORROSIVE LIQUID, N.O.S. (4-NONYLPHENOL, BRANCHED - Triethylene tetramine)

**Transport hazard class(es)**

TDG-Class: 8

ADR-Class: 8

DOT-Hazard Class: 8

IATA-Class: 8

IMDG-Class: 8

**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: Yes

Environmental Pollutant: N.A.

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)**

N.A.

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

TDG:

TDG Special provisions: 16

Department of Transportation (DOT):

DOT-Special Provision(s): IB3, T7, TP1, TP28

DOT-Label(s): 8

DOT-Symbol: N/A

DOT-Cargo Aircraft: N/A

DOT-Passenger Aircraft: N/A

DOT-Bulk: N/A

DOT-Non-Bulk: N/A

Road and Rail ( ADR-RID ) :

ADR exempt: No

ADR-Label: 8

ADR-Hazard identification number: 80

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

Air ( IATA ) :

IATA-Passenger Aircraft: 852

IATA-Cargo Aircraft: 856

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisioning: A3 A803

Sea ( IMDG ) :

IMDG-Stowage Code: Category A SW2

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 223 274

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-A, S-B

IMDG-MFAG: N/A

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**15. Regulatory information**

**Canada - Federal regulations**

**DSL - Domestic Substances List**

**DSL Inventory:**

List of substances included in the DSL: 4-NONYLPHENOL, BRANCHED  
Triethylene tetramine

cas: 84852-15-3

cas: 112-24-3



2,4,6-Tri(dimethylaminomethyl)phenol  
TETRAETHYLENEPENTAMINE

cas: 90-72-2  
cas: 112-57-2

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

##### **NDSL Inventory:**

List of substances included in the NDSL: N,N'-DIMETHYLPROPANE-1,3-DIAMINE

cas: 111-33-1

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

##### **Substances listed in NPRI:**

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:**

4-NONYLPHENOL, BRANCHED is listed in TSCA Section 8b Section 8a - PAIR Section 5a - SNUR Section 12b

Triethylene tetramine is listed in TSCA Section 8b

2,4,6-Tri(dimethylaminomethyl)phenol is listed in TSCA Section 8b

N,N'-DIMETHYLPROPANE-1,3-DIAMINE is listed in TSCA Section 8b

TETRAETHYLENEPENTAMINE 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:**

4-NONYLPHENOL, BRANCHED

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

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

No substances listed

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

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

TETRAETHYLENEPENTAMINE is listed in CAA Section 112(b) - HON

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

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

No substances listed

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

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

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

No substances listed

##### **Massachusetts Right to know**

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

Triethylene tetramine

TETRAETHYLENEPENTAMINE

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

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

Triethylene tetramine

TETRAETHYLENEPENTAMINE

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

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

Triethylene tetramine

TETRAETHYLENEPENTAMINE

## 16. Other information

Safety Data Sheet dated: 6/10/2021 - 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
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H341	Suspected of causing genetic defects in contact with skin.
H361	Suspected of damaging fertility or the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H371	May cause damage to organs in contact with skin.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### 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
- 6. ACCIDENTAL RELEASE MEASURES
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION