

Safety Data Sheet ULTRABOND ECO 995

Safety Data Sheet dated: 10/16/2020 - version 5 Date of first edition: 05/22/2015

# **1. IDENTIFICATION**

Product identifier Mixture identification: Trade name: ULTRABOND ECO 995 Recommended use of the chemical and restrictions on use

Recommended use: Adhesive

Restrictions on use: N.A.

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

**Emergency 24 hour numbers:** (USA) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666

# 2. HAZARD(S) IDENTIFICATION



# Classification of the chemical

| Eye Irrit. 2A  | Causes serious eye irritation.   |
|----------------|--|
| Resp. Sens. 1  | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin Sens. 1   | May cause an allergic skin reaction.                                       |
| STOT RE 1      | Causes damage to organs through prolonged or repeated exposure if inhaled. |
| Carc. 2        | Suspected of causing cancer if inhaled.                                    |
| Label elements |  |

# **Pictograms and Signal Words**



# Hazard statements:

| H317 | May cause an allergic skin reaction.                                       |
|------|--|
| H319 | Causes serious eye irritation.   |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H351 | Suspected of causing cancer if inhaled.                                    |
| H372 | Causes damage to organs through prolonged or repeated exposure if inhaled. |

# **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 dust or mist.   |
| P264      | Wash skin thoroughly after handling.   |
| P272      | Contaminated work clothing should not be allowed out of the workplace.                                       |
| P280      | Wear protective gloves/protective clothing/eye protection/face protection.                                   |
| P284      | [In case of inadequate ventilation] wear respiratory protection.   |
| P302+P352 | IF ON SKIN: Wash with plenty of water.   |
| P304+P341 | IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position 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.
- P321 Specific treatment (see supplementary instructions on this label).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER.
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.

Dispose of contents/container in accordance with applicable regulations.

# Ingredient(s) with unknown acute toxicity:

None

P501

#### 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

N.A.

# Mixtures

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

#### List of components

| <b>Quantity</b><br>2.5-5 % | Name<br>CALCIUM OXIDE                   | <b>Ident. Numb.</b><br>CAS:1305-78-8 | <b>Classification</b><br>Skin Irrit. 2, H315; STOT SE 3,<br>H335; Eye Dam. 1, H318   | Registration Number |
|----------------------------|---|--------------------------------------|--|---------------------|
| 1-2.5 %                    | METHYLENEDIPHENYL DIISOCYANATE<br>(MDI) | CAS:26447-40-5                       | STOT RE 2, H373; Eye Irrit. 2A,<br>H319; STOT SE 3, H335; Skin<br>Irrit. 2, H315; Resp. Sens. 1,<br>H334; Skin Sens. 1, H317; Acute<br>Tox. 4, H332; Carc. 2, H351 |                     |
| 1-2.5 %                    | 4,4'-METHYLENEDIPHENYL<br>DIISOCYANATE  | CAS:101-68-8                         | Acute Tox. 4, H332; Skin Irrit. 2,<br>H315; Eye Irrit. 2A, H319; STOT<br>SE 3, H335; STOT RE 2, H373;<br>Carc. 2, H351; Resp. Sens. 1,<br>H334; Skin Sens. 1, H317 |                     |
| 0.1-0.25 %                 | 4-METHYLBENZENESULFONYL<br>ISOCYANATE   | CAS:4083-64-1                        | Eye Irrit. 2A, H319; STOT SE 3,<br>H335; Skin Irrit. 2, H315; Resp.<br>Sens. 1, H334   |                     |

# 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.

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 opthalmologist immediately.

Protect uninjured eye.

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

Eye irritation

# Eye damages

# 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:

Water.

Carbon dioxide (CO2).

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: 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.

#### **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.

See protective measures under point 7 and 8.

### Methods and material for containment and cleaning up

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

Wash with plenty of water.

# 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

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Control parameters**

# List of components with OEL value

| Component   | OEL<br>Type | Country     | Ceiling | Long<br>Term<br>mg/m3 | Long<br>Term<br>ppm | Short<br>Term<br>mg/m3 | Short<br>Term<br>ppm | Behaviour | Note  |
|---|-------------|-------------|---------|-----------------------|---------------------|------------------------|----------------------|-----------|---|
| CALCIUM OXIDE   | OSHA        |             |         | 5                     | ••                  | •                      | ••                   |           |   |
|   | ACGIH       |             |         | 2                     |                     |                        |                      |           | upper respiratory tract irritation;   |
|   | MAK         | GERMANY     |         | 1                     |                     |                        |                      |           |   |
|   | ACGIH       |             |         | 2                     |                     |                        |                      |           | upper respiratory tract irritation  |
|   | МАК         | AUSTRIA     |         | 1                     |                     | 4                      |                      |           |   |
|   | МАК         | SWITZERLAND |         | 2                     |                     |                        |                      |           |   |
| METHYLENEDIPHENYL<br>DIISOCYANATE (MDI)   | OSHA        |             | С       |                       |                     | 0,2                    | 0,02                 |           |   |
|   | МАК         | AUSTRIA     |         |                       |                     | 0,1                    | 0,01                 |           |   |
| 4,4'-<br>METHYLENEDIPHENYL<br>DIISOCYANATE  | ACGIH       |             |         |                       | 0,005               |                        |                      |           | respiratory sensitization<br>(listed under Methylene<br>bisphenyl isocyanate<br>(MDI)); |
|   | OSHA        |             | С       |                       |                     | 0,2                    | 0,02                 |           |   |
|   | MAK         | GERMANY     |         | 0,05                  |                     |                        |                      |           |   |
|   | ACGIH       |             |         |                       | 0,005               |                        |                      |           | respiratory sensitization<br>(listed under Methylene<br>bisphenyl isocyanate<br>(MDI))  |
|   | МАК         | AUSTRIA     |         | 0,05                  | 0,005               | 0,1                    | 0,01                 |           |   |
| Appropriate engineering controls: N.A.<br>Individual protection measures<br>Eye protection:<br>Use close fitting safety goggles, don't use eye lens.<br>Protection for skin:<br>Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. |             |             |         |                       |                     |                        |                      |           |   |
| Protection for hands:   |             |             |         |                       |                     |                        |                      |           |   |

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

Respiratory protection:

Use adequate protective respiratory equipment.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# Information on basic physical and chemical properties

Physical state: Liquid Appearance and colour: paste Beige Odour: Odourless Odour threshold: N.A. pH: N.A. Melting point / freezing point: N.A. Initial boiling point and boiling range: N.A. Flash point: 100 °C (212 °F) Evaporation rate: N.A. Upper/lower flammability or explosive limits: N.A. Vapour density: N.A. Vapour pressure: N.A. Relative density: 1.55 g/cm3 Solubility in water: Insoluble Solubility in oil: N.A. Partition coefficient (n-octanol/water): N.A. Auto-ignition temperature: N.A. Decomposition temperature: N.A. Viscosity: N.A. Explosive properties: N.A. Oxidizing properties: N.A.

Solid/gas flammability: N.A.

# Other information

Substance Groups relevant properties N.A. Miscibility: N.A. Fat Solubility: N.A. Conductivity: N.A.

# **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.

### **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:

| CALCIUM OXIDE                              | a) acute toxicity | LD50 Oral Rat = 500 mg/kg          |
|--|-------------------|------------------------------------|
| METHYLENEDIPHENYL<br>DIISOCYANATE (MDI)    | a) acute toxicity | LD50 Skin Rabbit > 6200 mg/kg      |
|  |                   | LC50 Inhalation Rat = 369 mg/l 4h  |
|  |                   | LD50 Oral Rat > 7400 mg/kg         |
|  |                   | LD50 Skin Rabbit > 10000 mg/kg     |
|  |                   | LC50 Inhalation Rat = 490 mg/m3 4h |
|  |                   | LD50 Oral Rat > 10000 mg/kg        |
| 4,4'-<br>METHYLENEDIPHENYL<br>DIISOCYANATE | a) acute toxicity | LC50 Inhalation Rat = 369 mg/m3 4h |
|  |                   | LD50 Oral Rat = 31600 mg/kg        |
| 4-<br>METHYLBENZENESULFON<br>YL ISOCYANATE | a) acute toxicity | LC50 Inhalation Rat > 640 ppm 1h   |
|  |                   | LD50 Oral Rat = 2234 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:

| METHYLENEDIPHENYL<br>DIISOCYANATE (MDI) | Group 3 |
|---|---------|
| 4,4'-METHYLENEDIPHENYL                  | Group 3 |

DIISOCYANATE

# 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

# **12. ECOLOGICAL INFORMATION**

#### Toxicity

Adopt good working practices, so that the product is not released into the environment. Eco-Toxicological Information:

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

| Component                               | Ident. Numb.    | Ecotox Infos  |
|---|-----------------|---|
| CALCIUM OXIDE                           | CAS: 1305-78-8  | a) Aquatic acute toxicity: LC50 Fish Cyprinus carpio = 1070 mg/L 96h IUCLID |
| METHYLENEDIPHENYL<br>DIISOCYANATE (MDI) | CAS: 26447-40-5 | d) Terrestrial toxicity : LC50 Worm Eisenia foetida > 1000 mg/kg 14d IUCLID |

d) Terrestrial toxicity : NOEC Worm Eisenia foetida >= 1000 mg/kg 14d IUCLID

# 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.

#### **14. TRANSPORT INFORMATION**

# **UN number**

ADR-UN number: N/A DOT-UN Number: N/A IATA-Un number: N/A IMDG-Un number: N/A

# **UN proper shipping name**

ADR-Shipping Name: N/A DOT-Proper Shipping Name: N/A IATA-Technical name: N/A IMDG-Technical name: N/A

# Transport hazard class(es)

ADR-Class: N/A DOT-Hazard Class: N/A IATA-Class: N/A IMDG-Class: N/A

# **Packing group**

ADR-Packing Group: N/A DOT-Packing group: N/A IATA-Packing group: N/A IMDG-Packing group: N/A

# **Environmental hazards**

Marine pollutant: No

Environmental Pollutant: N.A.

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

# N.A.

**Special precautions** Department of Transportation (DOT): DOT-Special Provision(s): N/A DOT-Label(s): N/A 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-Label: N/A ADR-Hazard identification number: N/A ADR-Transport category (Tunnel restriction code): N/A Air (IATA): IATA-Passenger Aircraft: N/A IATA-Cargo Aircraft: N/A IATA-Label: N/A IATA-Subsidiary hazards: N/A IATA-Erg: N/A IATA-Special Provisioning: N/A Sea ( IMDG ) : IMDG-Stowage Code: N/A IMDG-Stowage Note: N/A IMDG-Subsidiary hazards: N/A IMDG-Special Provisioning: N/A IMDG-Page: N/A IMDG-Label: N/A IMDG-EMS: N/A IMDG-MFAG: N/A

# **15. REGULATORY INFORMATION USA - Federal regulations**

| IJCA -  | TSCA invento                     | ices Control Act<br>ory:              |                            |                |                 |                |   |
|---------|----------------------------------|---------------------------------------|----------------------------|----------------|-----------------|----------------|---|
|         | All the compor                   | ents are listed on                    | the TSCA inventor          | /              |                 |                |   |
|         | TSCA listed s                    | ubstances:                            |                            |                |                 |                |   |
|         | CALCIUM OXID                     | ЭЕ                                    | is listed in TSCA          | Section 8b     |                 |                |   |
|         | METHYLENEDI<br>DIISOCYANATI      |                                       | is listed in TSCA          | Section 8b Se  | ction 8a - PAIR |                |   |
|         | 4,4'-METHYLEN<br>DIISOCYANATI    | NEDIPHENYL<br>E                       | is listed in TSCA          | Section 8b Se  | ction 8a - PAIR |                |   |
|         | 4-METHYLBEN<br>ISOCYANATE        | ZENESULFONYL                          | is listed in TSCA          | Section 8b     |                 |                |   |
| SARA -  |                                  |                                       | Reauthorization A          |                |                 |                |   |
|         |                                  | _                                     | rdous Substance            | S:             |                 |                |   |
|         | No substances                    |                                       |                            |                |                 |                |   |
|         |                                  | · Hazardous subs                      |                            |                |                 |                |   |
|         |                                  | NEDIPHENYL DIISC                      |                            |                |                 |                |   |
|         | Section 313 -                    | • Toxic chemical                      | list:                      |                |                 |                |   |
|         | 4,4'-METHYLEN                    | NEDIPHENYL DIISC                      | DCYANATE                   |                |                 |                |   |
| CERCL   | -                                | sive Environmen<br>) listed under CEI | ital Response, Co<br>RCLA: | mpensation, a  | nd Liability Ao | ct             |   |
|         | 4,4'-METHYLEN                    | VEDIPHENYL DIISC                      | DCYANATE Report            | able quantity: | 5000            | pounds         |   |
| CAA - ( | Clean Air Act                    |                                       |                            |                |                 |                |   |
|         | CAA listed su                    | bstances:                             |                            |                |                 |                |   |
|         | 4,4'-METHYLEN<br>DIISOCYANATI    |                                       | is listed in CAA           | Section 112(b  | ) - HAP Section | n 112(b) - HON |   |
| CWA -   | Clean Water A                    |                                       |                            |                |                 |                |   |
|         | CWA listed su                    |                                       |                            |                |                 |                |   |
|         | No substances                    |                                       |                            |                |                 |                |   |
|         | nia Proposition                  | c regulations<br>n 65                 |                            |                |                 |                |   |
|         | Substance(s)                     | listed under Cal                      | ifornia Propositio         | on 65:         |                 |                |   |
|         | No substances                    | listed                                |                            |                |                 |                |   |
| Massa   | chusetts Right                   |                                       |                            |                |                 |                |   |
|         |                                  |                                       | ssachusetts Righ           | t to know:     |                 |                |   |
|         | CALCIUM OXID                     |                                       |                            |                |                 |                |   |
|         |                                  | PHENYL DIISOCYA                       | . ,                        |                |                 |                |   |
|         |                                  | NEDIPHENYL DIISC                      | DCYANATE                   |                |                 |                |   |
| Pennsy  | vivania Right to                 |                                       | nnsylvania Right           | ta know        |                 |                |   |
|         |                                  |                                       | nnsylvania Right           | to know:       |                 |                |   |
|         |                                  |                                       |                            |                |                 |                |   |
| Now 1   |                                  | NEDIPHENYL DIISC                      | DETAINATE                  |                |                 |                |   |
| New Je  | ersey Right to l<br>Substance(s) |                                       | w Jersey Right to          | know:          |                 |                |   |
|         |                                  |                                       |                            |                |                 |                |   |
|         |                                  | PHENYL DIISOCYA                       | NATE (MDI)                 |                |                 |                |   |
|         |                                  | NEDIPHENYL DIISO                      |                            |                |                 |                |   |
| Canad   | la - Federal r                   |                                       |                            |                |                 |                |   |
|         | Domestic Subst<br>DSL Inventor   | tances List                           |                            |                |                 |                |   |
|         |                                  | <b>y</b> .<br>nces are listed in th   |                            |                |                 |                |   |
| אחכי    |                                  | : Substances List                     |                            |                |                 |                |   |
| ND9L -  | NDSL Invento                     | ory:                                  |                            |                |                 |                |   |
|         | No substances                    |                                       |                            |                |                 |                |   |
| NPRI -  | National Pollu                   | itant Release Inv                     | entory                     |                |                 |                |   |
| Date    | 10/28/2020                       | Draduction Nor                        | e ULTRABONI                |                |                 |                | P |

# Substances listed in NPRI:

No substances listed

# **16. OTHER INFORMATION**

| Code | Description  |
|------|--|
| H315 | Causes skin irritation.  |
| H317 | May cause an allergic skin reaction.                                       |
| H318 | Causes serious eye damage.   |
| H319 | Causes serious eye irritation.   |
| H332 | Harmful if inhaled.  |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation.  |
| H351 | Suspected of causing cancer.   |
| H351 | Suspected of causing cancer if inhaled.                                    |
| H372 | Causes damage to organs through prolonged or repeated exposure if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure.         |

Safety Data Sheet dated: 10/16/2020 - version 5

Product code: 2879

# Additional classification information



HMIS Health: 1 = Slight HMIS Health - Is health hazard chronic? Yes HMIS Flammability: 1 = Combustible if heated HMIS Reactivity: 0 = Minimal HMIS P.P.E.: Safety glasses, gloves NFPA Health: 1 = Slight NFPA Flammability: 1 = Combustible if heated NFPA Reactivity: 0 = Minimal NFPA Special Risk: N.A.

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.

# 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.

 $\label{eq:CAS: Chemical Abstracts Service (division of the American Chemical Society).$ 

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
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- 9. PHYSICAL AND CHEMICAL PROPERTIES
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