

Safety Data Sheet

MAPEFIX EP 100 COMP.B

Safety Data Sheet dated: 13/03/2023 - version 2

Date of first edition: 03/11/2022



Section 1: Identification

GHS Product identifier

Mixture identification:

Trade name: MAPEFIX EP 100 COMP.B

Trade code: 9019695

Recommended use of the chemical and restrictions on use

Recommended use: Chemical anchor for metallic rebar

Uses advised against: Data not available.

Supplier's details

Company: MAPEI AUSTRALIA Pty Ltd

180 Viking Drive Wacol QLD 4076 Australia

T. +61 7 32765000 (Mon-Fri 8am to 4.30pm)

F. +61 7 32765076

Responsible: sales@mapei.com.au

Emergency phone number

Australian Poisons Information Centre 24 Hour Service 13 11 26

Police or Fire Brigade 000

Section 2: Hazard(s) identification



Classification of the Hazardous chemical

Acute toxicity (oral), Category 4

Harmful if swallowed.

Skin corrosion, Category 1A

Causes severe skin burns and eye damage.

Serious eye damage, Category 1

Causes serious eye damage.

Skin Sensitisation, Category 1A

May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

GHS label elements, including precautionary statements

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.

Precautionary statements

P260

Do not breathe dust.

P264

Wash hands thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P280

Wear protective gloves/clothing and eye/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.

P302+P352

IF ON SKIN: Wash with plenty of water.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.

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

Other hazards which do not result in a classification

Other Hazards: No other hazards

Section 3: Composition and information on ingredients

Substances

no data available

Mixtures

Mixture identification: MAPEFIX EP 100 COMP.B

Hazardous components within the meaning of the "Australian Work Health and Safety (WHS)" regulation and related classification:

| Qty | Name | Ident. Numb. | Classification | Registration Number |
|-------------|---|--|--|-----------------------|
| ≥25 - <50 % | trimethylhexamethylenediamine | CAS:25513-64-8 EC:247-063-2 | Acute Tox. 4, H302; Skin Corr. 1A, H314; Skin Sens. 1A, H317 | 01-2119560598-25-XXXX |
| ≥5 - <10 % | 2,4,6-tris(dimethylaminomethyl)phenol | CAS:90-72-2 EC:202-013-9 Index:603-069-00-0 | Acute Tox. 4, H302; Skin Corr. 1C, H314; Eye Dam. 1, H318 | 01-2119560597-27-XXXX |
| ≥2.5 - <5 % | m-xylylenediamine | CAS:1477-55-0 EC:216-032-5 | Acute Tox. 4, H332; Acute Tox. 4, H302; Aquatic Chronic 3, H412; Aquatic Acute 3, H402; Skin Corr. 1B, H314; Skin Sens. 1B, H317 | 01-2119480150-50-XXXX |
| ≥2.5 - <5 % | p-toluenesulphonic acid (containing a maximum of 5 % H2SO4) | CAS:104-15-4 EC:203-180-0 Index:016-030-00-2 | Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315 | 01-2119538811-39-xxxx |

Section 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.

Symptoms caused by exposure

- Eye irritation
- Eye damages
- Skin Irritation
- Erythema

Medical attention and special treatment

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

Section 5: Firefighting measures

Suitable extinguishing media

- None in particular.
- Water.
- Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
Hazardous combustion products: no data available
Explosive properties: no data available
Oxidizing properties: no data 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.

HazChem Code/Emergency Action code

2X

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.

Environmental precautions

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

Take up mechanically and dispose of according to local/state/federal regulations
Suitable material for taking up: absorbing material, organic, sand
Scoop into containers and seal for disposal.
Wash with plenty of water.
Retain contaminated washing water and dispose it.

Section 7: Handling and storage

Precautions for safe handling

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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Section 8: Exposure controls and personal protection

Control parameters – exposure standards, biological monitoring

Community Occupational Exposure Limits (OEL)

| | OEL Type | Country | Occupational Exposure Limit |
|-------------------------------------|----------|------------------|--|
| m-xylylenediamine CAS: 1477-55-0 | ACGIH | | Ceiling - Short Term: 0,1 mg/m ³ Skin - Eye, skin, and GI irr |
| | | National FINLAND | Short Term: 0,1 mg/m ³ FINLAND, takvärde, hud |
| | | National NORWAY | Ceiling - Short Term: 0,1 mg/m ³ T: Ceiling value is an instantaneous value that indicates the maximum concentration of a chemical in the breathing zone that should not be exceeded |
| | | National AUSTRIA | Long Term: 0,1 mg/m ³ ; Short Term: 0,1 mg/m ³ |
| | ACGIH | | Ceiling - Short Term: 0,1 mg/m ³ |
| | ACGIH | | Skin - potential significant contribution to overall exposure by the cutaneous route;eye, gastrointestinal and skin irritation |

| | |
|-------------------|---|
| National FRANCE | Short Term: 0,1 mg/m ³ |
| National DENMARK | Ceiling - Short Term: 0,1 mg/m ³ - 0,02 ppm |
| National FINLAND | Ceiling - Short Term: 0,1 mg/m ³ |
| AUS AUSTRALIA | Ceiling - Short Term: 0,1 mg/m ³ |
| National PORTUGAL | Ceiling - Short Term: 0,1 mg/m ³ |
| National SLOVENIA | Long Term: 0,1 mg/m ³ |
| ACGIH | Ceiling - Short Term: 0,1 mg/m ³ |
| ACGIH | Skin - potential significant contribution to overall exposure by the cutaneous route; eye, gastrointestinal and skin irritation |
| National NORWAY | Ceiling - Short Term: 0,1 mg/m ³ |
| ACGIH | Ceiling - Short Term: 0,018 ppm |

Predicted No Effect Concentration (PNEC) values

trimethylhexamethylenedi amine
 Exposure Route: Fresh Water; PNEC Limit: 0,102 mg/l
 CAS: 25513-64-8

Exposure Route: Freshwater sediments; PNEC Limit: 0,622 mg/kg
 Exposure Route: Marine water; PNEC Limit: 0,01 mg/l
 Exposure Route: Marine water sediments; PNEC Limit: 0,062 mg/kg
 Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 72 mg/l
 Exposure Route: Soil; PNEC Limit: 10 mg/kg

m-xylylenediamine
 Exposure Route: Fresh Water; PNEC Limit: 0,094 mg/kg
 CAS: 1477-55-0

Exposure Route: Marine water; PNEC Limit: 0,0094 mg/l
 Exposure Route: Freshwater sediments; PNEC Limit: 0,43 mg/kg
 Exposure Route: Marine water sediments; PNEC Limit: 0,043 mg/kg
 Exposure Route: Intermittent release; PNEC Limit: 0,152 mg/l
 Exposure Route: Soil; PNEC Limit: 0,045 mg/kg
 Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 10 mg/l

p-toluenesulphonic acid (containing a maximum of 5 % H₂SO₄)
 Exposure Route: Fresh Water; PNEC Limit: 0,073 mg/l
 CAS: 104-15-4

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 58 mg/l
 Exposure Route: Marine water; PNEC Limit: 0,0073 mg/l
 Exposure Route: Soil; PNEC Limit: 0,016 mg/kg

Derived No Effect Level (DNEL) values

2,4,6-tris(dimethylaminomethyl)phenol
 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
 Worker Industry: 0,31 mg/m³
 CAS: 90-72-2

m-xylylenediamine
 Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
 Worker Industry: 0,33 mg/kg
 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
 Worker Industry: 1,2 mg/m³
 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
 Worker Industry: 0,2 mg/m³

p-toluenesulphonic acid (containing a maximum of 5 % H₂SO₄)
 Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
 Worker Industry: 7,6 mg/kg
 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
 Worker Industry: 53,6 mg/m³
 Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
 Consumer: 2,5 mg/kg
 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects

Consumer: 8,7 mg/m³

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 2,5 mg/kg

Appropriate engineering controls

no data 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; AS/NZS 2161.10:

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 protective 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 AS/NZS 1715-1716 for information on selection and use of appropriate respiratory protection equipment.

Use adequate protective respiratory equipment.

Section 9: Physical and chemical properties

Physical state: Solid

Appearance: paste

Color: Black

Odour: Characteristic

pH: no data available

Melting point / freezing point: no data available

Initial boiling point and boiling range: no data available

Flash point: no data available

Evaporation rate: no data available

Flammability (Solid, Gas) no data available

Lower and upper explosion limit/flammability limits: no data available

Vapour pressure: no data available

Vapour density: no data available

Relative density: 1.42 g/cm³

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

Kinematic viscosity: no data available

VOC % (Volatile Organic Compound) : 0 (Rule 1168) g/l

Particle characteristics:

Particle size: no data available

Particle size distribution: no data available

Shape and aspect ratio: no data available

Specific surface area: no data available

Section 10: Stability and reactivity

Reactivity

Stable under normal conditions

Chemical stability

no data available

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

Section 11: Toxicological information

Information on toxicological effects

Toxicological Information of the Preparation

| | |
|--------------------------------------|--|
| a) acute toxicity | The product is classified: Acute toxicity (oral), Category 4(H302) ATEmix - Oral : 1893.73 mg/kg bw LD50 Oral Rat = 813,1 mg/kg LD50 Skin Rabbit = 1216,6 mg/kg LC50 Inhalation Vapour Rat = 5,53 mg/l |
| b) skin corrosion/irritation | The product is classified: Skin corrosion, Category 1A(H314) |
| c) serious eye damage/irritation | The product is classified: Serious eye damage, Category 1(H318) |
| d) respiratory or skin sensitisation | The product is classified: Skin Sensitisation, Category 1A(H317) |
| e) germ cell mutagenicity | Not classified Based on available data, the classification criteria are not met |
| f) carcinogenicity | Not classified Based on available data, the classification criteria are not met |
| g) reproductive toxicity | Not classified Based on available data, the classification criteria are not met |
| h) STOT-single exposure | Not classified Based on available data, the classification criteria are not met |
| i) STOT-repeated exposure | Not classified Based on available data, the classification criteria are not met |
| j) aspiration hazard | Not classified Based on available data, the classification criteria are not met |

Toxicological information on main components of the mixture:

| | | |
|---|-------------------|--|
| trimethylhexamethylenedi amine | a) acute toxicity | LD50 Oral Rat = 910 mg/kg |
| 2,4,6- tris (dimethylaminomethyl) phenol | a) acute toxicity | LD50 Oral Rat = 2169 mg/kg LD50 Skin Rat > 1, ml/kg |
| m-xylenylenediamine | a) acute toxicity | LD50 Oral Mouse = 930 mg/kg LD50 Skin Rabbit = 2000 mg/kg LC50 Inhalation Mist Rat = 1,34 mg/l 4h LC50 Inhalation Rat = 700, ppm 1h |
| p-toluenesulphonic acid (containing a maximum of 5 % H2SO4) | a) acute toxicity | LD50 Skin Rabbit > 2000, mg/kg |

Section 12: Ecological information

Ecotoxicity

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 |
|---|---|--|
| trimethylhexamethylenediamine | CAS: 25513-64-8 - EINECS: 247-063-2 | a) Aquatic acute toxicity : LC50 Fish = 174 mg/L 48 a) Aquatic acute toxicity : EC50 Daphnia = 31,5 mg/L 24 a) Aquatic acute toxicity : EC50 Algae = 43,5 mg/L 72 a) Aquatic acute toxicity : NOEC Algae = 16 mg/L 72 c) Bacteria toxicity : EC50 Bacteria = 89 mg/L 17 b) Aquatic chronic toxicity : NOEC Fish = 10,9 mg/L - 34 d b) Aquatic chronic toxicity : NOEC Daphnia = 1,02 mg/L - 21 d d) Terrestrial toxicity : NOEC = 1000 mg/kg - 28 d |
| 2,4,6-tris(dimethylaminomethyl)phenol | CAS: 90-72-2 - EINECS: 202-013-9 - INDEX: 603-069-00-0 | a) Aquatic acute toxicity : LC50 Fish = 175 mg/L 96h a) Aquatic acute toxicity : EC50 Algae = 46,7 mg/L 72h a) Aquatic acute toxicity : NOEC Algae = 25,1 mg/L 72h |
| m-xylylenediamine | CAS: 1477-55-0 - EINECS: 216-032-5 | a) Aquatic acute toxicity : EC50 Algae = 20 mg/L 72h a) Aquatic acute toxicity : EC50 Daphnia = 15,2 mg/L 48h a) Aquatic acute toxicity : LC50 Fish Oryzias latipes = 87,6 mg/L 96h ECHA |
| p-toluenesulphonic acid (containing a maximum of 5 % H2SO4) | CAS: 104-15-4 - EINECS: 203-180-0 - INDEX: 016-030-00-2 | a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48h a) Aquatic acute toxicity : LD50 Fish = 500 mg/L 96h |

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects

no data available

Section 13: Disposal considerations

Disposal methods

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

no data available

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.

Section 14: Transport information

UN number

3259

UN proper shipping name

ADG-Shipping Name: AMINES, SOLID, CORROSIVE, N.O.S. (trimethylhexamethylenediamine)

ADR-Shipping Name: AMINES, SOLID, CORROSIVE, N.O.S. (trimethylhexamethylenediamine)

IATA-Technical name: AMINES, SOLID, CORROSIVE, N.O.S. (trimethylhexamethylenediamine)

IMDG-Technical name: AMINES, SOLID, CORROSIVE, N.O.S. (trimethylhexamethylenediamine)

Transport hazard class(es)

ADG-Class: 8

ADR-Class: 8

IATA-Class: 8

IMDG-Class: 8

Packing group, if applicable

ADG-Packing Group: III

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

Environmental hazards

ADG-Environmental Pollutant: No

Marine pollutant: No

Special precautions for user

ADG-Subsidiary hazards -

ADG-S.P.: 223 274

Road and Rail (ADR-RID):

ADR-Label: 8

ADR-Hazard identification number: 80

ADR-Special Provisions: 274

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

Air (IATA):

IATA-Passenger Aircraft: 860

IATA-Cargo Aircraft: 864

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisions: A3 A803

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: SG35 SGG18

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 223 274

IMDG-EMS: F-A, S-B

Additional Information

no data available

HazChem Code/Emergency Action code

no data available

Section 15: Regulatory information**Safety, health and environmental regulations specific for the product in question**

This Safety Data Sheet has been prepared according to the Australian Work Health and Safety (WHS) act and the Code of Practice on preparation of safety data sheets for Hazardous Chemicals.

AICIS: all components are listed

Section 16: Any other relevant information

| Code | Description |
|------|--|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |

| | |
|------|--|
| 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. |
| H335 | May cause respiratory irritation. |
| H402 | Harmful to aquatic life |
| H412 | Harmful to aquatic life with long lasting effects. |

| Code | Hazard class and hazard category | Description |
|-------------|---|--|
| 3.1/4/Inhal | Acute Tox. 4 | Acute toxicity (inhalation), Category 4 |
| 3.1/4/Oral | Acute Tox. 4 | Acute toxicity (oral), Category 4 |
| 3.2/1A | Skin Corr. 1A | Skin corrosion, Category 1A |
| 3.2/1B | Skin Corr. 1B | Skin corrosion, Category 1B |
| 3.2/1C | Skin Corr. 1C | Skin corrosion, Category 1C |
| 3.2/2 | Skin Irrit. 2 | Skin irritation, Category 2 |
| 3.3/1 | Eye Dam. 1 | Serious eye damage, Category 1 |
| 3.3/2A | Eye Irrit. 2A | Eye irritation, Category 2A |
| 3.4.2/1A | Skin Sens. 1A | Skin Sensitisation, Category 1A |
| 3.4.2/1B | Skin Sens. 1B | Skin Sensitisation, Category 1B |
| 3.8/3 | STOT SE 3 | Specific target organ toxicity — single exposure, Category 3 |
| AUS-HAE/A3 | Aquatic Acute 3 | Short-term (acute) aquatic hazard - Category 3 |
| AUS-HAE/C3 | Aquatic Chronic 3 | Long-term (chronic) aquatic hazard - Category 3 |

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

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

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:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 16. OTHER INFORMATION