

**Safety Data Sheet**  
**MAPEFLEX PU 45 FT**

Safety Data Sheet dated 3/25/2019 version 1



**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Mixture identification:

Trade name: MAPEFLEX PU 45 FT

Trade code: 906PG011152

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Recommended use: Polyurethane-based adhesive

Uses advised against: Data not available

**1.3. Details of the supplier of the safety data sheet**

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

www.mapei.co.uk (office hour 8:30-17:30)

Responsible: sicurezza@mapei.it

**1.4. Emergency telephone number**

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)1684 299 886

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960

**SECTION 2: Hazards identification**



**2.1. Classification of the substance or mixture**

**Regulation (EC) n. 1272/2008 (CLP)**

Resp. Sens. 1 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Adverse physicochemical, human health and environmental effects:

No other hazards

**2.2. Label elements**

**Regulation (EC) n. 1272/2008 (CLP)**

**Pictograms and Signal Words**



Danger

**Hazard statements:**

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary statements:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P284 [In case of inadequate ventilation] wear respiratory protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...

P501 Dispose of contents/container to ... .

**Special Provisions:**

EUH204 Contains isocyanates. May produce an allergic reaction.

**Contains:**

diphenylmethanediisocyanate isomers and homologues

4-isocyanatesulphonyltoluene;-tosyl isocyanate May produce an allergic reaction.

**Special provisions according to Annex XVII of REACH and subsequent amendments:**

None

**2.3. Other hazards**

No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

Mixture identification: MAPEFLEX PU 45 FT

#### Hazardous components within the meaning of the CLP regulation and related classification:

| Quantity         | Name   | Ident. Numb.  | Classification  | Registration Number   |
|------------------|--|---|---|-----------------------|
| ≥1 - <2.5 %      | N,N-dibenzyliden polyoxypropylene diamine          | CAS:136855-71-5                                     | Skin Irrit. 2, H315   |                       |
| ≥0.49 - <1 %     | 4-isocyanatesulphonyltoluene;-tosyl isocyanate     | CAS:4083-64-1<br>EC:223-810-8<br>Index:615-012-00-7 | Eye Irrit. 2, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1,1A,1B, H334, EUH014   | 01-2119980050-47-XXXX |
| ≥0.25 - <0.49 %  | diphenylmethanediisocyanate isomers and homologues | CAS:9016-87-9<br>EC:618-498-9<br>Index:615-005-00-9 | Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1,1A,1B, H334; Skin Sens. 1,1A,1B, H317; STOT RE 2, H373; Carc. 2, H351 |                       |
| ≥0.01 - <0.016 % | 2-methoxy-1-methylethyl acetate                    | CAS:108-65-6<br>EC:203-603-9<br>Index:607-195-00-7  | Flam. Liq. 3, H226  | 01-2119475791-29-xxxx |
| ≥0.005 - <0.01 % | phosphoric acid ... %, orthophosphoric acid ... %  | CAS:7664-38-2<br>EC:231-633-2<br>Index:015-011-00-6 | Met. Corr. 1, H290; Skin Corr. 1B, H314   | 01-2119485924-24-XXXX |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

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:

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

### 4.2. Most important symptoms and effects, both acute and delayed

N.A.

### 4.3. 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)

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

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

Extinguishing media which must not be used for safety reasons:

None in particular.

### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

### 5.3. Advice for firefighters

Use suitable breathing apparatus.

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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

### 6.2. 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.

### 6.3. Methods and material for containment and cleaning up

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

Retain contaminated washing water and dispose it.

### 6.4. Reference to other sections

See also section 8 and 13

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## SECTION 7: Handling and storage

### 7.1. 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.

### 7.2. 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.

### 7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### List of components with OEL value

| Component  | OEL Type         | Country | Ceiling | Long Term mg/m <sup>3</sup> | Long Term ppm | Short Term mg/m <sup>3</sup> | Short Term ppm | Behaviour | Note   |
|--|------------------|---------|---------|-----------------------------|---------------|------------------------------|----------------|-----------|--|
| 4-isocyanatesulphonyltoluene;-tosyl isocyanate     | SUVA             | NNN     | 0,02    |                             |               | 0,02                         |                |           |  |
| diphenylmethanediisocyanate isomers and homologues | ACGIH            | NNN     |         |                             | 0,05          |                              |                |           |  |
|  | SUVA             | NNN     | 0,02    |                             |               | 0,02                         |                |           |  |
| 2-methoxy-1-methylethyl acetate                    | ACGIH            | NNN     | 275     | 50                          | 550           | 100                          |                |           | Skin   |
|  | SUVA             | NNN     | 275     | 50                          |               |                              |                |           |  |
|  | National SWEDEN  |         | 250     | 50                          | 400           | 75                           |                |           | SWEDEN, Short-term value, 15 minutes average value |
|  | National FINLAND |         | 270     | 50                          | 550           | 100                          |                |           | FINLAND, hud                                       |
|  | National NORWAY  |         | 270     | 50                          |               |                              |                |           | NORWAY, H  |

|   |          |         |     |    |     |     |  |
|---|----------|---------|-----|----|-----|-----|--|
|   | NDS      | NNN     | 260 |    |     |     |  |
|   | NDSch    | NNN     | 520 |    |     |     |  |
|   | EU       | NNN     | 275 | 50 | 550 | 100 | Skin   |
|   | National | NORWAY  | 275 | 50 | 550 | 100 |  |
| phosphoric acid ... %, orthophosphoric acid ... % | National | SWEDEN  | 1   |    | 3   |     | SWEDEN, Short-term value, 15 minutes average value |
|   | National | FINLAND | 1   |    | 2   |     |  |
|   | National | NORWAY  | 1   |    |     |     |  |
|   | EU       | NNN     | 1   |    | 2   |     |  |
|   | National | NORWAY  | 1   |    | 2   |     |  |
|   | ACGIH    | NNN     | 1   |    | 3   |     | URT, eye and skin irr                              |
|   | National | POLAND  | 1   |    | 2   |     |  |

#### Predicted No Effect Concentration (PNEC) values

| Component                       | CAS-No.  | PNEC LIMIT  | Exposure Route                      | Exposure Frequency | Remark |
|---------------------------------|----------|-------------|-------------------------------------|--------------------|--------|
| 2-methoxy-1-methylethyl acetate | 108-65-6 | 0,635 mg/l  | Fresh Water                         |                    |        |
|                                 |          | 0,0635 mg/l | Marine water                        |                    |        |
|                                 |          | 3,29 mg/kg  | Freshwater sediments                |                    |        |
|                                 |          | 0,329 mg/kg | Marine water sediments              |                    |        |
|                                 |          | 6,35 mg/l   | Intermittent release                |                    |        |
|                                 |          | 100 mg/l    | Microorganisms in sewage treatments |                    |        |
|                                 |          | 0,29 mg/kg  | Soil                                |                    |        |

#### Derived No Effect Level. (DNEL)

| Component   | CAS-No.   | Worker Industrial | Worker Professional | Consumer   | Exposure Route   | Exposure Frequency          | Remark |
|---|-----------|-------------------|---------------------|------------|------------------|-----------------------------|--------|
| 2-methoxy-1-methylethyl acetate                   | 108-65-6  | 796 mg/kg         |                     | 320 mg/kg  | Human Dermal     | Long Term, systemic effects |        |
|   |           | 275 mg/m3         |                     | 33 mg/m3   | Human Inhalation | Long Term, systemic effects |        |
|   |           |                   |                     | 36 mg/kg   | Human Oral       | Long Term, systemic effects |        |
|   |           | 550 mg/m3         |                     |            | Human Inhalation | Short Term, local effects   |        |
| phosphoric acid ... %, orthophosphoric acid ... % | 7664-38-2 | 2,92 mg/m3        |                     | 0,73 mg/m3 | Human Inhalation | Long Term, local effects    |        |

#### 8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

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; EN 374:

Polychloroprene - CR: thickness  $\geq 0,5\text{mm}$ ; breakthrough time  $\geq 480\text{min}$ .

Nitrile rubber - NBR: thickness  $\geq 0,35$ mm; breakthrough time  $\geq 480$ min.

Butyl rubber - IIR: thickness  $\geq 0,5$ mm; breakthrough time  $\geq 480$ min.

Fluorinated rubber - FKM: thickness  $\geq 0,4$ mm; breakthrough time  $\geq 480$ min.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

#### Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

Use adequate protective respiratory equipment.

#### Hygienic and Technical measures

N.A.

#### Appropriate engineering controls:

N.A.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance and colour: paste various

Odour: characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A.

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.35 g/cm<sup>3</sup>

Solubility in water: Insoluble

Partition coefficient (n-octanol/water): N.A. - This product is a mixture

Auto-ignition temperature: N.A. - No explosive or spontaneous ignition in contact with air at room temperature

Decomposition temperature: N.A.

Viscosity: 1,300,000.00 cPs

Explosive properties: N.A. - No components with explosive properties

Oxidizing properties: N.A. - No component with oxidizing properties

Solid/gas flammability: N.A.

### 9.2. Other information

No additional information

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions

### 10.2. Chemical stability

Stable under normal conditions

### 10.3. Possibility of hazardous reactions

None.

### 10.4. Conditions to avoid

Stable under normal conditions.

### 10.5. Incompatible materials

None in particular.

### 10.6. Hazardous decomposition products

None.

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## SECTION 11: Toxicological information

### 11.1. 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-isocyanatesulphonyltoluene;-tosyl isocyanate     | a) acute toxicity         | LC50 Inhalation Rat > 640 ppm 1h        |
|  |                           | LD50 Oral Rat = 2234 mg/kg              |
| diphenylmethanediisocyanate isomers and homologues | a) acute toxicity         | LD50 Oral Rat > 10000 mg/kg             |
|  |                           | LD50 Skin Rabbit > 9400 mg/kg           |
|  |                           | LC50 Inhalation Dust Rat = 0,31 mg/l 4h |
|  |                           | LC50 Inhalation Rat = 0,49000 mg/l 4h   |
|  | g) reproductive toxicity  | NOAEL Inhalation Rat = 12 mg/m3         |
| 2-methoxy-1-methylethyl acetate                    | a) acute toxicity         | LD50 Oral Rat > 5000 mg/kg              |
|  |                           | LD50 Skin Rabbit > 5000 mg/kg           |
|  |                           | LC50 Inhalation Dust Rat > 23,8 mg/l    |
|  | e) germ cell mutagenicity | NOAEL Inhalation Rat = 1000 ppm         |
|  | g) reproductive toxicity  | NOAEL Inhalation Rat = 500 ppm          |
| phosphoric acid ... %, orthophosphoric acid ... %  | a) acute toxicity         | LD50 Oral Rat = 1530 mg/kg              |
|  |                           | LC50 Inhalation Rat > 0,85 mg/l 1h      |
|  |                           | LD50 Skin Rabbit = 2,740 mg/kg          |

**If not differently specified, the information required in Regulation (EU)2015/830 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
- i) STOT-repeated exposure
- j) aspiration hazard

## SECTION 12: Ecological information

### 12.1. 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

| Quantity          | Component  | Ident. Numb.  | Ecotox Infos  |
|-------------------|--|---|---|
| >=0.25 - <0.49 %  | diphenylmethanediisocyanate isomers and homologues | CAS: 9016-87-9<br>- EINECS: 618-498-9 - INDEX: 615-005-00-9 | a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96        |
|                   |  |   | a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24     |
|                   |  |   | b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d |
|                   |  |   | a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72       |
|                   |  |   | c) Bacteria toxicity : EC50 > 100 mg/L 3                    |
|                   |  |   | d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d          |
|                   |  |   | e) Plant toxicity : NOEC > 1000 mg/kg - 14 d                |
| >=0.01 - <0.016 % | 2-methoxy-1-methylethyl acetate                    | CAS: 108-65-6 -   | a) Aquatic acute toxicity : LC50 Fish = mg/L 96             |

EINECS: 203-603-9 - INDEX: 607-195-00-7

- a) Aquatic acute toxicity : EC50 Daphnia > 500 mg/L 48
- b) Aquatic chronic toxicity : NOEC Fish = 47,5 mg/L - 14 d
- b) Aquatic chronic toxicity : NOEC Daphnia = 100 mg/L - 21 d
- a) Aquatic acute toxicity : EC50 Algae > 1000 mg/L 72
- a) Aquatic acute toxicity : NOEC Algae = 1000 mg/L 96

>=0.005 - <0.01 % phosphoric acid ... %, orthophosphoric acid ... %

CAS: 7664-38-2 - EINECS: 231-633-2 - INDEX: 015-011-00-6

- a) Aquatic acute toxicity : LC50 Fish = 138 mg/L 96

- c) Bacteria toxicity : EC50 Bacteria = 270 mg/L

## 12.2. Persistence and degradability

N.A.

## 12.3. Bioaccumulative potential

N.A.

## 12.4. Mobility in soil

N.A.

## 12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

## 12.6. Other adverse effects

N.A.

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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## SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

### 14.1. UN number

N.A.

### 14.2. UN proper shipping name

N.A.

### 14.3. Transport hazard class(es)

N.A.

### 14.4. Packing group

N.A.

### 14.5. Environmental hazards

N.A.

### 14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID):

N.A.

ADR-Hazard identification number: NA

Air (IATA):

N.A.

Sea (IMDG):

N.A.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

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## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC (2004/42/EC) : N.A.

Dir. 98/24/EC (Risks related to chemical agents at work)  
 Dir. 2000/39/EC (Occupational exposure limit values)  
 Regulation (EC) n. 1907/2006 (REACH)  
 Regulation (EU)2015/830  
 Regulation (EC) n. 1272/2008 (CLP)  
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
 Regulation (EU) n. 286/2011 (ATP 2 CLP)  
 Regulation (EU) n. 618/2012 (ATP 3 CLP)  
 Regulation (EU) n. 487/2013 (ATP 4 CLP)  
 Regulation (EU) n. 944/2013 (ATP 5 CLP)  
 Regulation (EU) n. 605/2014 (ATP 6 CLP)  
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
 Regulation (EU) n. 2016/918 (ATP 8 CLP)  
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
 Regulation (EU) n. 2017/776 (ATP 10 CLP)  
 Provisions related to directive EU 2012/18 (Seveso III):

N.A.

**German Water Hazard Class.**

N.A.

**Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:**

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: 30, 56

**SVHC Substances:**

No Data Available

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out for the mixture.

**SECTION 16: Other information**

| Code   | Description  |
|--------|--|
| EUH014 | Reacts violently with water.   |
| H226   | Flammable liquid and vapour.   |
| H290   | May be corrosive to metals.  |
| H314   | Causes severe skin burns and eye damage.                                   |
| H315   | Causes skin irritation.  |
| H317   | May cause an allergic skin reaction.                                       |
| 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 .  |
| H373   | May cause damage to organs through prolonged or repeated exposure .        |

| Code          | Hazard class and hazard category | Description  |
|---------------|----------------------------------|--|
| 2.16/1        | Met. Corr. 1                     | Substance or mixture corrosive to metals, Category 1           |
| 2.6/3         | Flam. Liq. 3                     | Flammable liquid, Category 3                                   |
| 3.1/4/Inhal   | Acute Tox. 4                     | Acute toxicity (inhalation), Category 4                        |
| 3.2/1B        | Skin Corr. 1B                    | Skin corrosion, Category 1B                                    |
| 3.2/2         | Skin Irrit. 2                    | Skin irritation, Category 2                                    |
| 3.3/2         | Eye Irrit. 2                     | Eye irritation, Category 2                                     |
| 3.4.1/1       | Resp. Sens. 1                    | Respiratory Sensitisation, Category 1                          |
| 3.4.1/1-1A-1B | Resp. Sens. 1,1A,1B              | Respiratory Sensitisation, Category 1,1A,1B                    |
| 3.4.2/1-1A-1B | Skin Sens. 1,1A,1B               | Skin Sensitisation, Category 1,1A,1B                           |
| 3.6/2         | Carc. 2                          | Carcinogenicity, Category 2                                    |
| 3.8/3         | STOT SE 3                        | Specific target organ toxicity — single exposure, Category 3   |
| 3.9/2         | STOT RE 2                        | Specific target organ toxicity — repeated exposure, Category 2 |

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**



**Classification according to Regulation (EC) Nr. 1272/2008**      **Classification procedure**

3.4.1/1

Calculation method

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

VOC: 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

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

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.