

## Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

### PROFLOW MVS PART B

Date of first edition: 15/10/2025

Safety Data Sheet dated 15/10/2025

version 1

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

### 1.1. Product identifier

Mixture identification:

Trade name: PROFLOW MVS PART B

Trade code: KA0470

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

Recommended use: additive

Uses advised against: All uses other than recommended ones

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

Company: Kerakoll UK Ltd

Tomlinson Road, Leyland, Lancashire, PR25 2DY,

United Kingdom

Tel. 01772 456831

safety@kerakoll.co.uk

### 1.4. Emergency telephone number

European emergency phone number 112

Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

Malta In case of emergency call: +356 2395 2000 (24h)

## SECTION 2: Hazards identification



### 2.1. Classification of the substance or mixture

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

Skin Sens. 1A May cause an allergic skin reaction.

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

#### Regulation (EC) No 1272/2008 (CLP):

#### Hazard pictograms and Signal Word



Warning

#### Hazard statements

H317 May cause an allergic skin reaction.

#### Precautionary statements

P261 Avoid breathing dust or mist.

P280 Wear protective gloves and eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

#### Contains

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

**Special provisions according to Annex XVII of REACH and subsequent amendments:**  
None.

**2.3. Other hazards**

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards: No other hazards

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

N.A.

**3.2. Mixtures**

Mixture identification: PROFLOW MVS PART B

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

Qty	Name	Ident. Numb.	Classification	Registration Number
<0.05 %	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Acute Tox. 2, H330; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:1	01-2120761540-60
			Specific Concentration Limits: C ≥ 0.036%: Skin Sens. 1A H317	
<0.0015 %	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS:55965-84-9 Index:613-167-00-5	Acute Tox. 2, H330; Acute Tox. 2, H310; Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:100, M-Acute:100, EUH071	
			Specific Concentration Limits: C ≥ 0.6%: Skin Corr. 1C H314 0.06% ≤ C < 0.6%: Skin Irrit. 2 H315 C ≥ 0.6%: Eye Dam. 1 H318 0.06% ≤ C < 0.6%: Eye Irrit. 2 H319 C ≥ 0.0015%: Skin Sens. 1A H317	

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose off 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 label hazardous.

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).

**SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

- Water.
- Carbon dioxide (CO2).

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 .
- 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

- Wear personal protection equipment.
- Remove persons to safety.
- See protective measures under point 7 and 8.

For emergency responders:

- Wear personal protection equipment.

6.2. Environmental precautions

- Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
- Retain contaminated washing water and dispose it.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
- Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

- Suitable material for taking up: absorbing material, organic, sand
- Wash with plenty of water.

6.4. Reference to other sections

- See also section 8 and 13

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.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	NATIONAL	GERMANY	Long Term: 0.2 mg/m3; Short Term: 0.4 mg/m3 DFG; Long term and short term: inhalable fraction Source: TRGS900

NATIONAL	AUSTRIA	Long Term: 0.05 mg/m <sup>3</sup> MAK, Sh Source: GKV, BGBl. II Nr. 156/2021
SUVA	SWITZERLAND	Long Term: 0.2 mg/m <sup>3</sup> ; Short Term: 0.4 mg/m <sup>3</sup> TWA mg/m <sup>3</sup> : (i), S, SSC, VRS Peau Yeux / OAW Haut Auge Source: suva.ch/valeurs-limites

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

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one  
CAS: 2634-33-5

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1.1 µg/l  
Exposure Route: Marine water; PNEC Limit: 403 ng/L  
Exposure Route: Intermittent releases (marine water); PNEC Limit: 110 ng/L  
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1.03 mg/l  
Exposure Route: Freshwater sediments; PNEC Limit: 49.9 µg/kg  
Exposure Route: Marine water sediments; PNEC Limit: 4.99 µg/kg  
Exposure Route: Soil; PNEC Limit: 3 mg/kg  
Exposure Route: Fresh Water; PNEC Limit: 3.39 µg/l

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
CAS: 55965-84-9

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 3.39 µg/l  
Exposure Route: Marine water; PNEC Limit: 3.39 µg/l  
Exposure Route: Intermittent releases (marine water); PNEC Limit: 3.39 µg/l  
Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 230 µg/l  
Exposure Route: Freshwater sediments; PNEC Limit: 27 µg/l  
Exposure Route: Marine water sediments; PNEC Limit: 27 µg/l  
Exposure Route: Soil; PNEC Limit: 10 µg/l

**Derived No Effect Level (DNEL) values**

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one  
CAS: 2634-33-5

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects  
Worker Professional: 966 µg/kg; Consumer: 345 µg/kg

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
CAS: 55965-84-9

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects  
Worker Professional: 20 µg/m<sup>3</sup>; Consumer: 20 µg/m<sup>3</sup>

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects  
Worker Professional: 40 µg/m<sup>3</sup>; Consumer: 20 µg/m<sup>3</sup>

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects  
Consumer: 90 µg/kg

Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects  
Consumer: 110 µg/kg

**8.2. Exposure controls**

Eye protection:

Use close fitting safety goggles, don't use contact lenses.

Protection for skin:

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:

N.A.

Thermal Hazards:

Not expected if used as intended

Environmental exposure controls:

Prevent the product from entering sewers or surface and underground water.

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## SECTION 9: Physical and chemical properties

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

Physical state: Liquid

Colour: White

Odour: Characteristic

Odour threshold: N.A.

pH: 6.7 - 7.5  $\geq 6.70 \leq 7.50$

Kinematic viscosity:  $\leq 20,5 \text{ mm}^2/\text{sec}$  (40 °C)

Melting point/freezing point: N.A.

Boiling point or initial boiling point and boiling range:  $> 35 \text{ °C}$  (95 °F)

Flash point:  $> 93^\circ\text{C}$

Lower and upper explosion limit: N.A.

Relative vapour density: N.A.

Vapour pressure: N.A.

Density and/or relative density: N.A.

Solubility in water: Miscible

Solubility in oil: N.A.

Partition coefficient n-octanol/water (log value): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 0 % ; 0 g/l

#### Particle characteristics:

Particle size: N.A.

### 9.2. Other information

No other relevant information

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions

### 10.2. Chemical stability

Data not available.

### 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 hazard classes as defined in Regulation (EC) No 1272/2008

#### Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 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:

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	a) acute toxicity	LD50 Oral Rat = 670 mg/kg	
		LD50 Skin Rat > 2000 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative	
	c) serious eye damage/irritation	Eye Corrosive Positive	irreversible damage
	d) respiratory or skin sensitisation	Skin Sensitization Guinea pig Positive	
	f) carcinogenicity	Genotoxicity Rat Negative	Oral route
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 112 mg/kg	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	a) acute toxicity	LD50 Oral Rat = 69 mg/kg	
		LD50 Skin Rabbit = 141 mg/kg	
		LC50 Inhalation Rat = 0.33 mg/l 4h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Positive	
	c) serious eye damage/irritation	Eye Corrosive Rabbit Positive	
	d) respiratory or skin sensitisation	Skin Sensitization Positive	
	f) carcinogenicity	Genotoxicity Negative	
		Carcinogenicity Skin Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat = 22.7 mg/kg	

#### 11.2. Information on other hazards

##### Endocrine disrupting properties:

No endocrine disruptor substances present in concentration  $\geq 0.1\%$

## 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 Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

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

Component	Ident. Numb.	Ecotox Data
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1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one  
 CAS: 2634-33-5  
 - EINECS: 220-120-9 - INDEX: 613-088-00-6

a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 2.15 mg/L 96h OECD Guideline 203

a) Aquatic acute toxicity : EC50 Daphnia magna = 2.9 mg/L 48h OECD Guideline 202

a) Aquatic acute toxicity : EC50 Algae green alga Selenastrum capricornutum freshwater algae = 110 µg/L OECD Guideline 201

d) Terrestrial toxicity : EC50 Worm Eisenia fetida > 410.6 mg/kg OECD Guideline 207 - Duration 14d

d) Terrestrial toxicity : EC10 soil microorganisms = 263.7 mg/kg - long term

a) Aquatic acute toxicity : NOEC Sludge activated sludge 10.3 mg/L 3h OECD Guideline 209

e) Plant toxicity : LC50 Triticum aestivum = 200 mg/kg OECD Guideline 208

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
 CAS: 55965-84-9 - INDEX: 613-167-00-5

a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 0.19 mg/L 96h EPA OPP 72-1 (Fish Acute Toxicity Test)

b) Aquatic chronic toxicity : NOEC Fish Danio rerio = 0.02 mg/L „OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test) - 35days

a) Aquatic acute toxicity : LC50 Daphnia magna = 0.16 mg/L 48h EPA OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test)

b) Aquatic chronic toxicity : NOEC Daphnia magna = 0.1 mg/L EPA OPP 72-4 (Fish Early Life-Stage and Aquatic Invertebrate Life-Cycle Studies) - 21days

a) Aquatic acute toxicity : EC50 Algae Skeletonema costatum = 0 mg/L 96h „OECD Guideline 201 (Alga, Growth Inhibition Test)

a) Aquatic acute toxicity : EC50 Sludge activated sludge = 4.5 mg/L 3h „OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

d) Terrestrial toxicity : LC50 Worm Eisenia fetida = 613 mg/kg „OECD Guideline 207 (Earthworm, Acute Toxicity Tests) - 14days

e) Plant toxicity : NOEC Trifolium pratense, Oryza sativa, Brassica napus = 1000 mg/L OECD Guideline 208 (Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test) - 21days

## 12.2. Persistence and degradability

Component	Persistence/Degradability:	Test	Notes:
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	Non-readily biodegradable	CO2 production	OECD Guideline 301C
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Non-readily biodegradable		

## 12.3. Bioaccumulative potential

Component	Bioaccumulation	Test	Value	Notes:
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	Bioaccumulative	BCF - Bioconcentration factor	6.620	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Bioaccumulative	BCF - Bioconcentration factor	54.000	≤ 54

## 12.4. Mobility in soil

N.A.

## 12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration >= 0.1%

## 12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

## 12.7. Other adverse effects

N.A.

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force. Disposal through discharge into wastewater is not permitted

The product disposed of as such, pursuant to Regulation (EU) 1357/2014, must be classified as hazardous waste

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

### Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

N.A.

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## SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

### 14.1. UN number or ID number

### 14.2. UN proper shipping name

N.A.

### 14.3. Transport hazard class(es)

ADR-Class: N.A.

### 14.4. Packing group

N.A.

ADR-Packing Group:

### 14.5. Environmental hazards

N.A.

### 14.6. Special precautions for user

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

### 14.7. Maritime transport in bulk according to IMO instruments

N.A.

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## SECTION 15: Regulatory information

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

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 (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)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)

Regulation (EU) n. 2023/707

Regulation (EU) n. 2023/1434 (ATP 19 CLP)

Regulation (EU) n. 2023/1435 (ATP 20 CLP)

Regulation (EU) n. 2024/197 (ATP 21 CLP)



Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

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

Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

None

#### **Explosives precursors – Regulation 2019/1148**

No substances listed

#### **Regulation (EU) No 649/2012 (PIC regulation)**

No substances listed

#### **German Water Hazard Class.**

1: Low hazard to waters

#### **German Lagerklasse according to TRGS 510:**

LGK 10

SVHC Substances:

No SVHC substances present in concentration  $\geq 0.1\%$

#### **15.2. Chemical safety assessment**

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

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### **SECTION 16: Other information**

<b>Code</b>	<b>Description</b>
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

<b>Code</b>	<b>Hazard class and hazard category</b>	<b>Description</b>
3.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1

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

<b>Classification according to Regulation (EC) Nr. 1272/2008</b>	<b>Classification procedure</b>
Skin Sens. 1A, H317	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 MSDS 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: Keep Away From Heat  
 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.