

Safety Data Sheet according to Reg. 878/2020/EU**DETERDEK PRO ECO ADVANCED FORMULA**

Safety Data Sheet dated 12/18/2024 version 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Mixture identification:

Trade name: DETERDEK PRO ECO ADVANCED FORMULA

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

Recommended use: Professional; Industrial; Consumer

Uses advised against: No other uses are foreseen besides those below identified.

Use description: Acid descaler.

1.3. Details of the supplier of the safety data sheet

Company: FILA Solutions S.P.A. SB

Via Garibaldi, 58

35018 San Martino di Lupari (PD)

ITALIA

tel. +39.049.9467300

fax +39.049.9460753

Responsible: sds@filasolutions.com

1.4. Emergency telephone number

UNITED KINGDOM: NHS Direct 111 (In England, Scotland North Ireland) 08454647 (Wales); IRELAND 018092166

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) n. 1272/2008 (CLP)**

Eye Dam. 1 Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements**Regulation (EC) No 1272/2008 (CLP):****Pictograms and Signal Words**

Danger

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves and eye/face protection.

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/doctor/...

Contains

sulphamidic acid

Regulation (EC) nr 648/2004 (Detergents).**Product contents:**

non-ionic surfactants < 5%

Dir. 2004/42/EC (VOC directive)

This product contains max 32.16 g/l VOC.

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 $\geq$ 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients**3.1. Substances**

N.A.

3.2. Mixtures

Mixture identification: DETERDEK PRO ECO ADVANCED FORMULA

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

Qty	Name	Ident. Numb.	Classification	Registration Number
8-15 %	sulphamidic acid	CAS:5329-14-6 EC:226-218-8 Index:016-026-00-0	Aquatic Chronic 3, H412; Eye Irrit. 2, H319; Skin Irrit. 2, H315	01-2119488633-28
< 5%	(2-methoxymethylethoxy)propanol	CAS:34590-94-8 EC:252-104-2	Substance with a Union workplace exposure limit.	01-2119450011-60
< 2%	Isotridecanol, ethoxylated	CAS:69011-36-5	Eye Dam. 1, H318; Aquatic Chronic 3, H412	

SECTION 4: First aid measures**4.1. Description of first aid measures**

In case of skin contact:

After contact with skin, wash with soap and plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

In case of eyes contact:

Remove any contact lenses. Wash immediately and abundantly with lukewarm water for at least 30/60 minutes, opening the eyelids well. Consult a doctor immediately.

In case of Ingestion:

Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

In case of Inhalation:

Bring the subject to open air. In the event of breathing difficulties, get medical advice/attention immediately.

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

Causes serious eye damage.

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: Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media:

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE.

Do not breathe combustion products.; In the event of a fire, carbon oxides can be released. Sulphur oxides.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Move away from the area surrounding the spill or release. Do not smoke.

Wear a mask, gloves and protective clothing. Consult the protective measures set out in points 7 and 8.

6.1.2 For emergency personnel:

Wear a mask, gloves and protective clothing. Move people to a safe place.

Eliminate all naked flames and possible sources of ignition. Do not smoke. Provide adequate ventilation.

Evacuate the danger area and, if necessary, consult an expert. Consult the protective measures set out in points 7 and 8.

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.

7.2. Conditions for safe storage, including any incompatibilities

Conditions for safe storage, including any incompatibilities:

Store only in the original container.

Keep containers away from any incompatible material (see section 10 for details).

Requirements for storage areas and containers:

Store containers sealed, in a well-ventilated place, away from direct sunlight and moisture.

Advice on common storage:

Collecting tanks must be made of substance-resistant material (special plastics).

Risks associated with corrosive conditions:

Acids and alkaline solutions may interact by giving off strong heat and must therefore be stored separately. They can be stored in the same fire compartment, provided they do not mix in the event of fire or leakage (separate collection tanks).

Do not store together with food or fodder.

Keep away from:

Store at least 3 m away from: Chemicals/products that react easily with each other.

7.3. Specific end use(s)

The intended uses are indicated in section 1. No further specific uses are foreseen.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

OEL Type	Country	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
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(2-methoxymethylethoxy) propanol CAS: 34590-94-8	MAK	AUSTRIA	307. 00000000	50.00000000	614. 00000000	100. 00000000
	VLEP	BELGIUM	308. 00000000	50.00000000		
	OEL	DENMARK	309. 00000000	50.00000000	618. 00000000	100. 00000000
	EU		308. 00000000	50.00000000		
	OEL	FINLAND	310. 00000000	50.00000000		
	OEL	IRELAND	308. 00000000	50.00000000		
	OEL	ITALY	308. 00000000	50.00000000		
	OEL	LATVIA	308. 00000000	50.00000000		
	OEL	NORWAY	300. 00000000	50.00000000		
	VLEP	ROMANIA	308. 00000000	50.00000000		
	VLA	SPAIN	308. 00000000	50.00000000		
	OEL	SWEDEN	300. 00000000	50.00000000	450. 00000000	75.00000000
	MAK	NETHERLAND S	300. 00000000			
	OSHA PEL	UNITED STATES OF AMERICA	600. 00000000	100. 00000000		
	WEL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	308. 00000000	50.00000000		

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
sulphamidic acid CAS: 5329-14-6	1.8 mg/l	Fresh Water		
	0.18 mg/l	Marine water		
	8.36 mg/kg	Freshwater sediments		
	0.84 mg/kg	Marine water sediments		
	5 mg/kg	Soil		
	20 mg/kg	Intermittent releases (fresh water)		
(2-methoxymethylethoxy) propanol	19 mg/l	Fresh Water		

CAS: 34590-94-8

190 mg/l	Intermittent releases (fresh water)
190000 0000 mg/l	Marine water
4168 mg/l	Microorganisms in sewage treatments
70.2 mg/kg dw	Freshwater sediments
7.02 mg/kg dw	Marine water sediments
2.74 mg/Kg bw/day	Soil

Isotridecanol, ethoxylated CAS: 69011-36-5	4.36 µg/L	Fresh Water
	5.44 µg/L	Intermittent releases (fresh water)
	0.436 µg/L	Marine water
	0.544 µg/L	Intermittent releases (marine water)
	4.35 mg/l	Microorganisms in sewage treatments
	0.119 mg/kg dw	Freshwater sediments
	0.012 mg/kg dw	Marine water sediments
	0.021 mg/kg dw	Soil

Derived No Effect Level (DNEL) values

	Worker Industr y	Worker Profess ional	Consu mer	Exposure Route	Exposure Frequency	Remark
sulphamidic acid CAS: 5329-14-6			17.4 ppm	Human Inhalation	Long Term (repeated)	
			5 mg/kg	Human Dermal	Long Term (repeated)	
			5 mg/kg	Human Oral	Long Term (repeated)	
	10 mg/kg	10 mg/kg		Human Dermal	Long Term (repeated)	
	70.5 ppm	70.5 ppm		Human Inhalation	Long Term, systemic effects	
(2- methoxymethyletho	308 mg/m3	308 mg/m3		Human Inhalation	Long Term, systemic effects	

Revision: 2 Revision date: 18/12/2024 Print date: 18/12/2024

Replaced revision: [1] (dated [19.07.2023])

xy)propanol
CAS: 34590-94-8

283 mg/Kg bw/day	283 mg/Kg bw/day	Human Dermal	Long Term, systemic effects
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37.2 mg/m3	Human Inhalation	Long Term, systemic effects
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121 mg/Kg bw/day	Human Dermal	Long Term, systemic effects
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36 mg/Kg bw/day	Human Oral	Long Term, systemic effects
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Isotridecanol, ethoxylated CAS: 69011-36-5	37 mg/m3	37 mg/m3	Human Inhalation	Long Term, systemic effects
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263 mg/Kg bw/day	263 mg/Kg bw/day	Human Dermal	Long Term, systemic effects
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6.53 mg/m3	Human Inhalation	Long Term, systemic effects
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93.8 mg/Kg bw/day	Human Dermal	Long Term, systemic effects
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2.5 mg/Kg bw/day	Human Oral	Long Term, systemic effects
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8.2. Exposure controls

Eye protection:

Wear airtight protective goggles (see standard EN 166).

Protection for skin:

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344).
Wash body with soap and water after removing protective clothing.

Protection for hands:

Generally not necessary. In case of prolonged contact protect hands with category I work gloves (ref. Standard EN 374).

Recommended material: Nitrile, minimum 0.38 mm thick or equivalent protective barrier material with a high level performance for conditions of use in continuous contact, with a minimum permeability time of 480 minutes in accordance with the CEN standard EN 420 and EN 374.

Respiratory protection:

Generally not necessary for normal use. In case of aerosol formation or exceeding the threshold value (e.g. TLV-TWA) of the substance or one or more of the substances present in the product, it is recommended to wear a mask with type A filter combined with type P filter (ref. standard EN 14387).

The use of respiratory protection means is necessary in case the technical measures adopted are not sufficient to limit the exposure of the worker to the threshold values taken into consideration. The protection offered by the masks is however limited.

Thermal Hazards:

N.A.

Environmental exposure controls:

Emissions from manufacturing processes, including those from ventilation equipment, should be controlled for compliance with environmental protection legislation.

Product residues must not be discharged without control into waste water or water courses.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Liquid

Appearance and colour: Liquid Transparent colourless

Odour: Characteristic

pH: 0.50

Kinematic viscosity: > 20,5 mm²/sec (40 °C)
 Melting point / freezing point: < 0°C
 Initial boiling point and boiling range: > 100°C
 Flash point: > 93°C
 Upper/lower flammability or explosive limits: N.A. (not flammable)
 Vapour density: N.D. (not determined as it is considered irrelevant for the characterisation of the product)
 Vapour pressure: N.D. (not determined as it is considered irrelevant for the characterisation of the product)
 Relative density: 1.07 kg/l
 Solubility in water: Very soluble
 Solubility in oil: not soluble
 Partition coefficient (n-octanol/water): N.A.(mixture)
 Auto-ignition temperature: N.A. (not self-ignitable)
 Decomposition temperature: N.A. (Sulphamidic acid: decomposes with heat at 209°C/408°F to release sulfur dioxide, sulfur trioxide, and ammonia gases.)
 Flammability: N.A. (not relevant for liquid)

Particle characteristics:

Particle size: Not Relevant
 VOC content (g/L) in the product (2010/75/UE) 32.16
 VOC content % in the product (2010/75/UE) 3.00

9.2. Other information

Explosive properties: not explosives
 Viscosity: 1.00 cPo
 Oxidizing properties: not oxidizing
 No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

Product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

Avoid contact with strong alkalis.

10.5. Incompatible materials

Alkali

10.6. Hazardous decomposition products

Due to thermal decomposition or in the event of fire, gases and vapours potentially harmful to health may be released: Carbon oxides, Sulphur oxides, Hydrogen sulphide, Toxic gases.

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 Proprietary test according to OECD guideline n. 404 performed on rabbit in GLP (OECD, 1998). During the initial single animal test and the confirmatory test, the test object did not cause any skin reactions in the rabbits tested in the form of application site erythema or edema as observed at 1 hour, 24, 48 and 72 hours after removing the patch. Based on the "Primary Irritation Index" of zero (0.00) observed in this study, and as defined in the evaluation criteria, the product was found to be non-irritating to rabbit skin. No skin reactions were observed in this study at 24, 48 and 72 hours after patch removal.
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	Not classified Based on available data, the classification criteria are not met

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:

sulphamidic acid	a) acute toxicity	LD50 Oral Rat = 3160 mg/kg bw	
		LD50 Skin Rat > 2000 mg/kg bw	
	b) skin corrosion/irritation	Skin Irritant	
	c) serious eye damage/irritation	Eye Irritant	
(2-methoxymethylethoxy)propanol	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg bw	OECD 401
		LD50 Skin Rabbit > 2000 mg/kg bw	OECD 402
Isotridecanol, ethoxylated	a) acute toxicity	LD50 Oral Rat > 10000 mg/kg bw	

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
sulphamidic acid	CAS: 5329-14-6 - EINECS: 226-218-8 - INDEX: 016-026-00-0	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 70.3 mg/L 96h OCSE 203
		b) Aquatic chronic toxicity : NOEC Fish Danio Rerio ≥ 60 mg/L OCSE 210 - 34 giorni
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 71.6 mg/L 48h OCSE 210
		b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 19 mg/L - 21 giorni
		a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 48 mg/L 72h OCSE 210
(2-methoxymethylethoxy)propanol	CAS: 34590-94-8 - EINECS: 252-104-2	a) Aquatic acute toxicity : EC50 Daphnia Daphnia Magna > 1000 mg/L

Isotridecanol, ethoxylated	a) Aquatic acute toxicity : EC50 Algae Skeletonema > 1000 mg/L	
	CAS: 69011-36-5	a) Aquatic acute toxicity : LL50 Fish Danio rerio > 1.1 mg/L 96h - OECD 203
		a) Aquatic acute toxicity : EL50 Daphnia magna 0.544 mg/L 48h - OECD 202
		a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus 3.4 mg/L 72h - EU Method C.3

12.2. Persistence and degradability

Component	Persistence/Degradability:	Test	Duration	Value
(2-methoxymethylethoxy)propanol	Readily biodegradable	OECD 301F	28 days	79.000
Isotridecanol, ethoxylated	Readily biodegradable	OECD 301 B	28 days	75.000

12.3. Bioaccumulative potential

Component	Bioaccumulation
(2-methoxymethylethoxy)propanol	Not bioaccumulative
Isotridecanol, ethoxylated	Not bioaccumulative

12.4. Mobility in soil

Component	Mobility in soil
(2-methoxymethylethoxy)propanol	Mobile

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

12.6 Endocrine disrupting properties

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

12.7 Other adverse effects

None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:	: Consign to an incinerator or to an authorized landfill according to local regulations.
Contaminated containers	: Empty containers may contain residues of the product. Collect any residues present using suitable containers (for suitable packaging materials see section 7.2 and see section 10.5 for incompatible materials). After adequate washing, such packaging can be reused. Packaging to be disposed of is to be considered as the material itself. Follow the warnings on the label even after emptying the container, the physical/chemical properties that may influence the options for waste treatment are reported in section 2.
European Waste Catalogue number	: No waste code according to the European Waste Catalogue can be assigned to this product, as the assignment is dictated by the intended use. The waste code is established in agreement with the local waste disposal company.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N.A.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

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.

Air (IATA) :

N.A.

Sea (IMDG) :

N.A.

14.7. Maritime transport in bulk according to IMO instruments

N.A.

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 (UE) n. 758/2013

Regulation (UE) n. 2019/1148

Regulation (UE) n. 2020/878

Regulation (CE) n. 790/2009

Regulation (UE) n. 286/2011

Regulation (UE) n. 618/2012

Regulation (UE) n. 487/2013

Regulation (UE) n. 944/2013

Regulation (UE) n. 605/2014

Regulation (UE) n. 2015/1221

Regulation (UE) n. 2016/918

Regulation (UE) n. 2016/1179

Regulation (UE) n. 2017/776

Regulation (UE) n. 2018/669

Regulation (UE) n. 2018/1480

Regulation (UE) n. 2019/521

Regulation (UE) n. 2020/217

Regulation (UE) n. 2020/1182

Regulation (UE) n. 2021/643

Regulation (UE) n. 2021/849

Regulation (UE) n. 2021/1962

Regulation (UE) n. 2022/692

Regulation (UE) n.2023/1434

TLV-ACGIH ACGIH 2023

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):

N.A.

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

No substances listed

SVHC Substances:

No data available

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 3.00 %

Volatile Organic compounds - VOCs = 32.16 g/L

Dir. 2010/75/EC (VOC directive)

Volatile Organic compounds - VOCs = 3.00 %

Volatile Organic compounds - VOCs = 32.16 g/L

15.2. Chemical safety assessment

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

Substances for which a Chemical Safety Assessment has been carried out:

sulphamidic acid

SECTION 16: Other information

Code Description

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

CLASSIFICATION METHOD:

Method of evaluating the information referred to in Article 9 of Regulation (EC) No 1272/2008 that was used for the purposes of classification: expert judgement and proprietary experimental data.

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: 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.

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
- 5. FIRE-FIGHTING MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 10. STABILITY AND REACTIVITY
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION