

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

1.1 Product identifier

Product form: Mixture
Product name: NANO ECOLINE GRAFFITI PROTECTION
UFI: PEF7-T43W-YE2E-EY0R
Art. No: HS-OS-004, HS-OS-005

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

Identified use: For industrial use for professional users
Anti-graffiti coating
Hydro- and oleophobicization of smooth and porous surfaces

Uses advised against:
No further information available

1.3 Details of the supplier providing the safety data sheet

Manufacturer: NanoEnzo B.V.
De Eenruiter 6
3833 SB Leusden
the Netherlands T
+31 850 07 99 00
info@nanoenzo.nl

1.4 Emergency number

Country	Organization/Company	Address	Emergency number	Remark
the Netherlands	the National Poisons Information Center (NVIC)	Utrecht	112 31 88 755 8000	

SECTION 2: Potential hazards

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

The product has not been classified as hazardous according to current legislation.

2.2 Labeling elements

not applicable

2.3 Other hazards. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disrupting properties-toxicity

The substance/mixture does not contain any components which are subject to REACH Article 57(f) or Delegated Regulation (EU) 2017/2100 of the European Parliament and of the Commission or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more have endocrine disrupting properties.

Endocrine disrupting properties-ecotoxicity

The substance/mixture does not contain any components which are subject to REACH Article 57(f) or Delegated Regulation (EU) 2017/2100 of the European Parliament and of the Commission or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

General information: Aqueous preparation based on a fluoro-organofunctional **polysiloxane**

Chemical name	Concentration	CAS No.	EC no.	REACH Registration s-No	M-factor:	Notes
Ethanol (ethyl alcohol)	<2%	64-17-5	200-578-6	01-211945761043	No data is available.	#

There are limit values for exposure at the workplace for this substance.

Classification

Chemical name	Classification	Notes
Ethanol (ethyl alcohol)	Classification: Flam. Liq.: 2: H225; Eye Irrit.: 2: H319; Additional information on the label: None known. Specific concentration limit: Eye irritation category 2, >= 50 %; Acute toxicity, oral: LD 50: 10,470 mg/kg Acute toxicity, inhalative: LC 50: 124.7 mg/l	No data available.
	Acute toxicity, dermal: LD 50: > 20.000 mg/kg	

CLP: Regulation No. 1272/2008.

The full text for all H-phrases is given in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhale:	Do not inhale aerosol. If aerosols or mists are formed: Provide fresh air.
Skin contact:	Wash off with plenty of soap and water.
Eye contact:	Rinse thoroughly with plenty of water if the eyelid is open. If symptoms persist, consult an ophthalmologist.
Ingestion:	Rinse mouth with water. After ingestion of larger amounts of substance / in case of complaints, seek medical treatment.

Personal protection for first responders: No data available.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	None known.
Hazards:	None known.

4.3 Indications for immediate medical attention and specialized treatment:

After ingestion of large quantities of substances: Administration of activated charcoal. Acceleration of gastrointestinal transit.

SECTION 5: Fire-fighting measures

5.1 Extinguishing agents

Suitable extinguishing agents:	Water spray jet, foam, extinguishing powder or CO ₂ .
Unsuitable extinguishing agents:	Full water jet.

5.2 Special hazards arising from the substance or mixture:

Usual measures for fires involving chemicals. Possible formation of fluorine-containing fire gases.

5.3 Instructions for firefighting

Firefighting instructions: Extinguishing water must not be discharged into the sewerage system, subsoil or the groundwater bodies. Ensure that there are sufficient retention facilities for extinguishing water. Fire residues and contaminated extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighting:

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** Wear personal protective equipment.
- 6.1.1 Personnel not trained for emergencies:** No data is available.
- 6.1.2 Operational forces:** No data is available.
- 6.2 Environmental protection measures:** Do not allow to enter wastewater, soil, water bodies, ground water, sewage system.
- 6.3 Methods and material for containment and cleaning:** Absorb with inert liquid-binding material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pour into labeled, tightly sealable containers. Dispose of in accordance with regulations.
For personal protective equipment, see section 8. For disposal instructions, see section 13.
- 6.4 Reference to other sections:**

SECTION 7: Handling and storage:

7.1 Protective measures for safe handling

Technical measures:

Ensure good ventilation if vapors/aerosols are produced.

Do not inhale spray mist / aerosols.

The usual precautionary measures for handling chemicals must be observed.

The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and modifications (CE marking).

If the workplace-related limit values are exceeded and / or if large quantities are released (leaks, spills, dust), the specified respiratory protection must be used.

If there is a possibility of skin / eye contact, the specified hand protection / eye protection / eye protection must be used.

Use body protection.

Avoid contact with skin and eyes.

Measures to avoid contact: No data available.

7.2 Conditions for safe storage taking into account incompatibilities

Conditions for safe storage:

Take measures against electrostatic charging, keep away from sources of ignition. Keep container tightly closed in a cool, well-ventilated place.

Safe packaging materials:

No data available.

Storage class:

12: Non-flammable liquids that do not belong to any of the to the afore mentioned LGK.

7.3 Specific end uses: Spray applications in building protection: Please take note of our application instructions in the technical data sheet.

SECTION 8: Exposure controls/personal protective equipment

8.1 Parameters to be monitored

Occupational exposure limits

Chemical name	Kind	Exposure limit values	Source
Ethanol (ethyl alcohol)	MAK 4	200 ppm 380 mg/m ³	Germany. DFG-MAK list (recommended occupational exposure limits). Commission for the Investigation of Health Hazards from Chemical Compounds in the Work Area (DFG) (2017)
	AGW 4	200 ppm 380 mg/m ³	Germany. TRGS 900, Occupational exposure limits, as amended from time to time (06 2018)

Please refer to the latest edition of the relevant source text and consult an industrial hygiene expert or similar specialist or the local authorities for further information.

Exposure guidelines

Chemical name	Kind	Source
Ethanol (ethyl alcohol)	Peak limitation category: Category II: Resorptive substances.	Germany. DFG-MAK list (recommended occupational exposure limits). Commission for the Investigation of Health Hazards from Chemical Compounds in the Work Area (DFG)
Ethanol (ethyl alcohol)	AGW: If the AGW and BGW values are complied with, there should be no fruit damage (see number 2.7).	Germany. TRGS 900, Occupational exposure limits, as amended from time to time

Biological limit values

No biological exposure limits are given for the ingredient(s).

DNEL values

Critical component	Kind	Exposure path	Health warnings	Remarks
Ethanol (ethyl alcohol)	Employees	inhalative	Local, short-term; 1900 mg/m ³	Irritation of the respiratory tract
	Average population	Dermal	Systemic, long-term; 206 mg/kg	Toxicity of repeated doses
	Average population	inhalative	Systemic, long-term; 114 mg/m ³	Carcinogenicity
	Average population	Oral	Systemic, long-term; 87 mg/kg	Toxicity of repeated doses
	Employees	Dermal	Systemic, long-term; 343 mg/kg	Toxicity of repeated doses
	Average population	Eyes	local effect;	No danger recognized
	Employees	inhalative	Systemic, long-term; 950 mg/m ³	
	Employees	Eyes	local effect;	Medium risk (no Threshold value derived)
	Average population	inhalative	Local, short-term; 950 mg/m ³	Irritation of the respiratory tract
	Average population	Eyes	local effect;	Medium risk (no Threshold value derived)
	Employees	Eyes	local effect;	No danger recognized

PNEC values

Critical component	Environmental compartment	PNEC values	Remarks
Ethanol (ethyl alcohol)	Predator	0.38 g/kg	Oral
	Sediment (seawater)	2.9 mg/kg	
	Predator	0.72 g/kg	Oral
	Sewage treatment plant	580 mg/l	
	Sediment (fresh water)	3.6 mg/kg	
	Floor	0.63 mg/kg	
	Aquatic (freshwater)	0.96 mg/l	
	Aquatic (seawater)	0.79 mg/l	

8.2 Exposure controls and monitoring

Suitable technical control equipment:

Ensure good ventilation if vapors/aerosols are produced.

Individual protective measures, for example personal protective equipment

Eye/face protection:

Safety goggles

Hand protection:

Material: Nitrile rubber.
Penetration time: ≥ 30 min
Glove thickness: 0.5 mm
Material: Fluororubber (Viton)
Penetration time: ≥ 480 min
Glove thickness: 0.4 mm
Additional information: The protective gloves must be selected for the specific workplace.
The workplace-specific suitability should be clarified with the protective glove manufacturers.
Data are based on own tests, literature data and/or information from glove manufacturers or are derived by analogy from similar substances. It should be noted that the daily usage time of a chemical protective glove in practice can be significantly shorter than the permeation time determined according to EN 374 due to the many influencing factors (e.g. temperature).

Skin and body protection:

Suitable protective clothing - Use disposable clothing if necessary.



Respiratory protection:

If dusts/vapors/aerosols occur (e.g. during spraying applications) or if limit values are exceeded (e.g. AGW):
Breathing apparatus with suitable respiratory protection.
Use filter (combination filter filter type ABEK-P2 or ABEK-P3) or ambient air-independent
Wear a respirator. Only use respiratory protective devices with a CE mark including a four-digit test number.
The respiratory protection filter class must be adapted to the maximum concentration of harmful substances (gas/vapor/aerosol/particles) that may arise when handling the product. Isolating equipment must be used if the concentration is exceeded. Observe the wearing time limit for respiratory protection.

Hygiene measures:

Do not eat, drink or smoke while working. Wash hands and / or face before breaks and at the end of work.
Remove soiled, soaked clothing immediately.
Wash contaminated clothing before wearing it again.

Environmental precautions:

see section 6.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Shape:	liquid
Color:	yellowish, transparent
Odor:	almost odorless
Odor threshold:	No data is available.
Freezing point:	-1 °C (ISO 3841)
Boiling point:	97 °C (1,013 hPa) (ASTM D-1120)
	not applicable

Flammability:

Upper/lower flammability or explosion limits

Explosion limit - upper:	No data is available.
Explosion limit - lower:	No data is available.
Flash point:	> 95 °C (DIN EN ISO 2719) No ignition up to the boiling point
Auto-ignition temperature:	No data is available.
Decomposition temperature:	(DSC) No decomposition in the area of application.
pH value:	approx. 4

Viscosity

Viscosity, dynamic:	Approximately 1.6 mPa*s (20 °C, OECD 114)
Viscosity, kinematic:	No data is available.
Flow time:	No data is available.

Solubility(ies)

Solubility in water:	miscible
Solubility (other):	No data is available.

Resolution speed:	No data is available.
Partition coefficient (n-Octanol/water) - log Pow:	approx. -1.8 (OECD 107)
Dispersion stability:	No data is available.
Vapor pressure:	23.4 hPa (20 °C) Water.
Relative density:	No data is available.
Density:	Approx. 1.06 g/cm ³ (20 °C) (DIN 51757)
Bulk density:	No data is available.
Relative vapor density:	No data is available.

9.2 Other information

Minimum ignition temperature:	575 °C (EU method A.15)
Peroxides:	not applicable
Surface tension	approx. 30.4 mN/m, 20 °C, OECD 115

SECTION 10: Stability and reactivity

10.1 Reactivity:	No hazardous reactions known if handled as directed.
10.2 Chemical stability:	Stable under specified storage conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	None known.
10.5 Incompatible materials:	None known.
10.6 Hazardous decomposition products:	None known.

SECTION 11: Toxicological information

11.1 Information on hazard classes according to Regulation (EC) No. 1272/2008

Information on likely routes of exposure

Inhale:	No data is available.
Skin contact:	No data is available.
Eye contact:	No data is available.
Ingestion:	No data is available.

Acute toxicity (list all possible routes of exposure)

Ingestion

Product: LD 50 (Rat): > 2,000 mg/kg (OECD 423)
Non-toxic after single exposure;

Components:

Ethanol (ethyl alcohol) LD 50 (rat, female, male): 10,470 mg/kg

Skin contact

Product: Not classified for acute toxicity based on available data.

ATEmix (estimated acute toxicity of the mixture): 60,120 mg/kg

Components:

Ethanol (ethyl alcohol) LD 50 (rabbit) : > 20.000 mg/kg (analogy)

Inhale

Product: ATEmix (estimated acute toxicity of the mixture): 250 mg/L vapor

Components:

Ethanol (ethyl alcohol) LC 50 (rat, female, male, 4 h): 124.7 mg/L **vapor**
Not applicable, dust and **mist**

Repeated dose toxicity

Product: No toxicological effects relevant for classification

Components

Ethanol (ethyl alcohol) No data available.

Corrosive/irritant effect on the skin

Product: OECD 404 (rabbit): Not irritating;

Components:

Ethanol (ethyl alcohol) OECD 404 (rabbit): Not irritating

Serious eye damage/irritation

Product: OECD 405 (rabbit): Not irritating;

Components:

Ethanol (ethyl alcohol) OECD 405 (rabbit): Irritant.

Respiratory or skin sensitization

Product: Magnussona i Kligmana, OECD 406 (guinea pigs):

No sensitizer for the skin.

Components:

Ethanol (ethyl alcohol) Maximization test, OECD 406 (guinea pig):
No sensitizer for the skin. (analogy)
Respiratory sensitizer (rat):
Not a respiratory sensitizer

Carcinogenicity

Product: No data is available.

Components:

Ethanol (ethyl alcohol) not **classified**

Germ cell mutagenicity

In vitro

Product:	Ames test (OECD 471): negative;
Components:	
Ethanol (ethyl alcohol)	Ames test (OECD 471): negative (analogy) Gene mutation test (OECD 476): negative (analogy)

In vivo

Product:	No data is available.
Components:	
Ethanol (ethyl alcohol)	Chromosomal aberration (OECD 478) Oral (mouse, male): negative

Reproductive toxicity

Product:	No data is available.
Components:	
Ethanol (ethyl alcohol)	not classified

Specific target organ toxicity - single exposure

Product:	No data available.
Components:	
Ethanol (ethyl alcohol)	not classified

Specific target organ toxicity - repeated exposure

Product:	No data is available.
Components:	
Ethanol (ethyl alcohol)	not classified

Aspiration hazard

Product:	no indication of aspiration toxicity
Components:	
Ethanol (ethyl alcohol)	not classified

11.2 Information on other hazards

Endocrine disrupting properties Product:

The substance/mixture does not contain components that exhibit endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more;

Components:	
Ethanol (ethyl alcohol)	No data available.

Other dangers

Product:	No data available.
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SECTION 12: Environmental information

12.1 Toxicity:

Acute aquatic toxicity:

Fish

Product:	LC 50 (Brachydanio rerio (zebrafish), 96 h): > 1,000 mg/l
	LC 50 (Brachydanio rerio (zebrafish), 96 h): >= 1,000 mg/l Components:
Ethanol (ethyl alcohol)	LC 50 (Pimephales promelas, 96 h): 11,200 mg/l

Aquatic invertebrates

Product: No data available.

Components:

Ethanol (ethyl alcohol)	LC 50 (Ceriodaphnia dubia, 48 h): 5,012 mg/l
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Toxicity in aquatic plants

Product: No data available.

Components:

Ethanol (ethyl alcohol)	EC50 (Chlorella vulgaris (freshwater algae), 72 h): 275 mg/l (OECD 201)
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Toxicity with microorganisms

Product: No data available.

Components:

Ethanol (ethyl alcohol)	IC 50 (activated sludge, 3 h): > 1,000 mg/l (OECD 209) (analogy)
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Chronic aquatic toxicity:

Fish

Product:	No data available. Components:
Ethanol (ethyl alcohol)	NOEC (Danio rerio, 120 h): 1,000 mg/l (OECD 212)

Aquatic invertebrates

Product: Components: No data is available.

Ethanol (ethyl alcohol)	LC 50 (Ceriodaphnia dubia, 10 d): 1,806 mg/l
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NOEC (Ceriodaphnia dubia, 10 d): 9.6 mg/l

LC 50 (Daphnia magna, 2 d): 9,248 mg/l

LC 50 (Daphnia magna, 9 d): 454 mg/l

NOEC (Daphnia magna, 9 d): 9.6 mg/l

Toxicity in aquatic plants

Product: No data available.

Components:

Ethanol (ethyl alcohol)	No data available.
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Toxicity with microorganisms

Product: No data available.

Components:

Ethanol (ethyl alcohol)	IC 50 (activated sludge, 3 h): > 1,000 mg/l (OECD 209) (analogy)
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12.2 Persistence and degradability

Biodegradation

Product: 62 % (28 d, (CO₂; modif. Sturm test / OECD 301 B)),
Partially biodegradable.

Components:

Ethanol (ethyl alcohol) 84 % (20 d) The product is readily biodegradable (aerobic)

BOD/COD ratio

Product: No data available.

Components:

Ethanol (ethyl alcohol) 58 %

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)

Product: No data available.

Components:

Ethanol (ethyl alcohol) No data available.

Partition coefficient n-octanol/water (log K_{ow})

Product: Log K_{ow}: Approximately -1.8 (OECD 107)

Components:

Ethanol (ethyl alcohol) Log K_{ow}: -0.35 at 20 °C

12.4 Mobility in soil:

Product Adsorption on soil: low.

Components:

Ethanol (ethyl alcohol) No data available.

12.5 Results of PBT and vPvB assessment:

Product This substance/mixture contains no components in concentrations of 0.1% or higher that are classified as either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

Components:

Ethanol (ethyl alcohol) Not classified vPvB substance,
Not classified **PBT** substance

12.6 Endocrine disrupting properties:

Product: The substance/mixture contains no components which are subject to REACH Article 57(f) or Delegated Regulation (EU) 2017/2100 of the European Parliament and of the Commission or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more have endocrine disrupting

properties.

Components:

Ethanol (ethyl alcohol) No data available.

12.7 Other adverse effects:

Other dangers

Product: The data available to us does not lead to any environmental labeling.

SECTION 13: Disposal instructions

13.1 Waste treatment processes

General information:

No data is available.

Disposal methods:

In compliance with local official regulations, e.g. to a suitable incineration plant. No waste code number can be defined for this product in accordance with the European Waste Catalogue, as only the intended use by the consumer allows an allocation. The waste code number must be determined in accordance with the European Waste Catalogue (EU Decision on the Waste Catalogue 2000/532/EC) in consultation with the disposal company / manufacturer / authority.

Contaminated

Packaging material:

If used packaging cannot be reused after appropriate cleaning, it must be recycled or disposed of in accordance with waste disposal regulations. Improper disposal or reuse of this container is illegal and can be dangerous.
Other countries: Observe national regulations.

SECTION 14: Transport information

14.1 UN/ID No.

Not classified as dangerous goods

14.2 UN proper shipping name

Not classified as dangerous goods

14.3 Transport hazard classes

Not classified as dangerous goods

14.4 Packing group

Not classified as dangerous goods

14.5 Environmental hazards

Not classified as dangerous goods

14.6 Special precautions for the user

Not applicable

14.7 Transport of bulk cargo by sea in accordance with IMO instruments

Not applicable to product as delivered.

SECTION 15: Legislation

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

EU regulations

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled substances: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New substances: None present or none present in regulated quantities.

REGULATION (EC) No 1907/2006 (REACH), ANNEX XIV DIRECTORY OF THE SUBSTANCES SUBJECT TO APPROVAL: None present or none present in regulated quantities.

Regulation (EU) 2019/1021 on persistent organic pollutants (recast), as amended: None present or none present in regulated quantities.

DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of November 24 2010 on Industrial Emissions (Integrated Pollution Prevention and Control), ANNEX II List of pollutants: None present or none present in regulated quantities.

Regulation (EC) No 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended: None present or none present in regulated quantities.

Regulation (EC) No 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended: None present or none present in regulated quantities.

Regulation (EC) No 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended: None present or none present in regulated quantities.

Regulation (EC) No 649/2012 concerning the export and import of dangerous chemicals, Annex V, as amended: None present or none present in regulated quantities.

EU. REACH candidate list of substances of very high concern (SVHC) for authorization: None present or none present in regulated quantities.

Regulation (EC) No. 1907/2006 Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles:

Chemical name	CAS No.	Entry no.
Ethanol (ethyl alcohol)	64-17-5	40

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work: None available or none available in regulated quantities.

Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding:
None available or none available in regulated quantities.

EU. Directive 2012/18/EU (SEVESO III) on the control of major-accident hazards involving dangerous substances, as amended: Not applicable

REGULATION (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register, ANNEX II: Pollutants:
None available or none available in regulated quantities.

Directive 98/24/EU on the protection of workers from the risks related to chemical agents at work:

Chemical name	CAS No.	Concentration
Ethanol (ethyl alcohol)	64-17-5	0 - <2,0%

National regulations

Water hazard class (WGK): WGK 1: slightly hazardous to water. Classification according to AwSV, Annex 1 (5.2)

Technical Instructions on Air Quality Control (TA-Air):

Ethanol (ethyl alcohol)	Section 5.2.5, Organic substances
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15.2 Chemical safety assessment: No chemical safety assessment is required for this product.

International regulations

Montreal Protocol: not applicable
Stockholm Convention: not applicable
Rotterdam Convention: not applicable
Kyoto Protocol: not applicable

SECTION 16: Other information

Abbreviations and acronyms:

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; **ADN** - European Agreement concerning the Carriage of Dangerous Goods by Inland Waterways; **AGW** - Occupational Exposure Limit; **ASTM** - American Society for Testing Materials; **AwSV** - Ordinance on Installations for the Handling of Substances Hazardous to Water substances; **BOD** - Biochemical Oxygen Demand; **c.c.** - closed container; **CAS** - Corporation for the Assignment of CAS Numbers; **CESIO** - European Committee on Organic Surfactants and their Intermediates; **COD** - Chemical Oxygen Demand; **DMEL** - Derived Minimum Effect Level; **DNEL** - Derived No Effect Level; **EbC50** - average inhibitory concentration of growth; **EC** - Effective Concentration; **EINECS** - European Inventory of Chemicals; **EN** - European Standard; **ErC50** - average Inhibitory concentration of the growth rate; **GGVSEB** - Dangerous Goods Ordinance Road, Railroad and inland waterway vessel; **GGVSee** - Dangerous Goods Ordinance Sea (Ordinance on Dangerous Goods at Sea); **GLP** - Good Laboratory Practice; **GMO** - Genetically Modified Organism; **IATA** - International Air Transport Association

Association; **ICAO** - International Civil Aviation Organization; **IMDG** - International Maritime and Defense Code
Dangerous goods at sea; **ISO** - International Organization for Standardization; **LD/LC** - lethal Dose/concentration; **LOAEL** - Lowest dose of an administered chemical substance at which adverse effects were still observed in animal experiments; **LOEL** - Lowest dose of an administered chemical substance at which effects were still observed in animal experiments; **M-Factor** - Multiplication factor; **NOAEL** - Highest dose of a substance that causes no recognizable and measurable adverse effects even after prolonged exposure. **NOEC** - No observable effect concentration; **NOEL** - No observable effect level; **o.c.** - Open container; **OECD** - Organization for Economic Co-operation and Development; **OEL** - Occupational Exposure Limit; **PBT** - Persistent, Bioaccumulative, Toxic; **PNEC** - Predicted No Effect Concentration in the respective environmental medium; **REACH** - REACH Registration; **RID** - Registration in accordance with REACH
Regulation on the International Carriage of Dangerous Goods by Rail; **SVHC** - Substances of Very High Concern; **TA** - Technical Instructions; **TRGS** - Technical Rules for Hazardous Substances
Rules for hazardous substances; **vPvB** - very persistent, very bioaccumulative; **WGK** - water hazard class

Important literature references and data sources: No data available.

Wording of the H-phrases in chapters 2 and 3

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.

Training information: No data is available.

Information on revision, disclaimer:

This information is based on our current knowledge and is only intended to describe the product in terms of health, safety and environmental conditions. It should therefore not be construed as a guarantee for specific properties of the product.