# **SAFETY DATA SHEET**





No. of pages: 9

Date of Issue: 15, 08, 2023 Version number: Revision date: Replaces version:

**ETERNAL LAK NA BETON** Product name:

1. Section 1: Identification of substance/mixture and of the company/undertaking

Product identifier: **ETERNAL LAK NA BETON** 

The product is not a nanoform, nor does it contain any nanoforms.

5C8D-T024-G71Y-YX13

12 Relevant identified uses of the substance or mixture and uses advised against:

1.2.1 Relevant identified use:

1.1

Life cycle phases: PW (wide use by professionals - basic)

C (consumer use)

Usage Name: SU0

lacquer for surface treatment of concrete floors and other interior and Other usage description:

exterior concrete constructions

Market description: PC9a: PC15

Contributing Activity Name: roller or brush application

non-industrial spraying techniques

Contributing activities descriptor: PROC10

PROC11

More information: technical function of the product in lacquer for surface treatment of

concrete floors and other interior

and exterior concrete

constructions

24 months

0 - 10 t / yr quantity to use:

No Regulatory status by use: a limited number of devices for this No

use:

the subsequent period of use

relevant to this use:

an overview of environmental

release categories for each life

ERC2; ERC8c; ERC8f; ERC10a;

ERC11a

cycle stage:

supplied as a mixture

all other uses

Uses advised against: 1.3

Details of the supplier of the safety data sheet:

AUSTIS a. s. Producer and supplier:

Adress: K Austisu 680, 154 00 PRAHA 5 - Slivenec

Telephone number: +420 251 099 111 +420 251 099 112 Fax: austis@austis.cz e-mail

1.4 +420 725 491 378 Emergency telephone number: +420 251 099 247

Centre of the Toxicologicaly information Na Bojišti 1, 120 00 Prague Tel.: +420 224 919 293

2. CZ

1.2.2

2. Section 2: Hazard identification

2.1 Classification of the substance or mixture

> Classification under Regulation 1272/2008/EU Eye Dam. 1; H318 Skin Sens. 1; H317

2.2 Label elements

Symbols:

GHS05 GHS07



| ı   | Signal word:  | Dangerous  |  |  |
|-----|---|--|--|--|
|     | It contains a hazardous substance:                          | <u> </u>   | -(3-(trimethoxysilyl)propyl) ethylenediamine<br> 318: Causes serious eye damage.<br> 317: May cause an allergic reaction on skin.<br> 280: Wear protective gloves/protective clothing/eye protection/ face |  |
|     | Hazard Statement:   | H318: Causes serious eye damage  |  |  |
|     | Precautionary Statement:                                    | P280: Wear protective gloves/prote   |  |  |
|     |   | protection.<br>P305+P351+P338: IF IN EYES: Ri  | inse cautiously with water for   |  |
|     |   | several minutes. Remove contact I  |  |  |
|     |   | Continue rinsing.<br>P310: Immediately call a POISON   | CENTER or doctor/physician.  |  |
|     |   | P302+P352: IF ON SKIN: Wash w<br>P333+P313: If skin irritation or rasl   | ith plenty of water and soap.  |  |
|     |   | attention.   |  |  |
|     |   | P501: Dispose of contents/contain<br>or dispose of hazardous waste in la   | •  |  |
| 2.3 | Other hazards:  | The mixture does not meet criteria to be classified as PBT or vPvB substances. The mixture is not endocrine disruptor, nor does it |  |  |
|     | Other rieke   | contain any.   | •  |  |
|     | Other risks:  | Not Assigned   |  |  |
| 3.  | Section 3: Composition / information on ingredients         |  |  |  |
|     | Mixture based on α-silane modified polyether binder and spe | cial additives.  |  |  |
| 3.2 | Mixtures  |  |  |  |
|     | Chemical name:  | N-(3-(trimethoxysilyl)propyl)<br>ethylenediamine   | N,N'-bis[3-<br>(trimethoxysilyl)propyl]<br>ethylenediamine   |  |
|     | Content [%]:  | 3,6  | ethylenediamine<br>0,45  |  |
|     | Index number:   | Not Assigned   | Not Assigned   |  |
|     | CAS:  | 1760-24-3  | 68845-16-9   |  |
|     | EC number (EINECS):   | 217-164-6  | 272-453-4  |  |
|     | REACH Registration number:                                  | 01-2119970215-39-0XXX  | Not Assigned   |  |
|     | Classification according to Directive 1272/2008/EU:         | Eye Dam. 1; H318<br>Skin Sens. 1; H317<br>STOT SE 3; H335  | Eye Dam. 1; H318   |  |
|     | Specific concentration limits, M-factors:                   | Not Assigned   | Not Assigned   |  |
|     | Chemical name:  | 7-(2-aminoethyl)-3,3,11,11-<br>tetramethoxy-2,12-dioxa-7-aza-<br>3.11-disilatridecane  | 2-(2,2-dimethoxy-1,2-<br>azasilolidin-1-yl)ethan-1-amine   |  |
|     | Content [%]:  | 0,225  | 0,225  |  |
|     | Index number:   | Not Assigned   | Not Assigned   |  |
|     | CAS:  | 74956-86-8   | 618914-51-5  |  |
|     | EC number (EINECS):   | 695-749-9  | 689-749-8  |  |
|     | REACH Registration number:                                  | Not Assigned   | Not Assigned   |  |
|     | Classification according to Directive 1272/2008/EU:         | Eye Dam. 1; H318   | Eye Dam. 1; H318   |  |
|     | Specific concentration limits, M-factors:                   | Not Assigned   | Not Assigned   |  |
|     | Chemical name:  | Methanol   |  |  |
|     | Content [%]:  | < 0,05   |  |  |
|     | Index number:   | 603-001-00-X   |  |  |
|     | CAS:  | 67-56-1  |  |  |
|     | EC number (EINECS):   | 200-659-6  |  |  |
|     | REACH Registration number:                                  | 01-2119433307-44-0XXX  |  |  |
|     | Classification according to Directive 1272/2008/EU:         | Flam. Liq. 2; H225<br>Acute Tox. 3; H331<br>Acute Tox. 3; H311<br>Acute Tox. 3; H301   |  |  |
|     | Specific concentration limits, M-factors:                   | STOT SE 1; H370<br>C ≥ 10 % => STOT SE 1; H370<br>3 % ≤ C < 10 % => STOT SE 2;<br>H371   |  |  |

Full text of H - phrases in Section 16

## 4. Section 4: First aid measures

## 4.1 Description of first aid measures

When providing first aid it is necessary to ensure safety of both victim and person rescuing. It is necessary to avoid chaotic behavior. Victim must be kept in mental and physical rest. Victim must be kept warm and must not get chilled. Take original container with label or safety data sheet with information about substance or mixture with you in case of medical examination.

Inhalation: Break exposure, move to fresh air protecting the victim from cold. Provide medical treatment especially if coughing, shortness of breath or other symptoms persist.

When on skin: Put away contaminated clothes and shoes, wash the contaminated spot with plenty of tepid water; if the skin is not irritated, soap can be used; seek doctor's advice, especially if the skin stays irritated.

Eye Contact: Rinse eyes with plenty of water (10 to 15 min). Keep eyes open (even by force if necessary). If the victim is wearing contact lenses remove them immediately. Seek medical attention.

Ingestion: Do not induce vomiting! Drink at least 0.5 liters of water with 5 to 10 tablets of crushed charcoal. In case of nausea contact the Toxicology Information Centre for need of medical treatment with information about composition of the mixture from the original container or SDS

4.2 Most important symptoms and effects, both acute and delayed

The product may have adverse effects through inhalation and if swallowed. It can irritate skin, mucous membranes and eyes.

4.3 Indication of any immediate medical attention and special treatment needed:

Symptomatic treatment

## 5. Section 5: Fire-fighting measures

5.1 Extinguishing media

 $Suitable\ extinguishing\ media:\ The\ product\ is\ not\ inflammable.\ Water\ spray\ (water\ mist),\ foam,\ carbon\ dioxide,\ dry\ powder.$ 

Unsuitable extinguishing media: The strong water current. It can be spread fire.

- 5.2 Specific danger linked to the substance or mixture: Carbon monoxide and NO<sub>x</sub> can be produced while burning.
- 5.3 Advice for firefighters: wear a breathing apparatus and protective clothing.

### 6. Section 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures: Appropriate protective gloves, goggles, appropriate clothing, or respirator.
- 6.1.1 For workers except for those intervening in emergency cases instructions in case of accidental spill and leak of substance or mixture:
  - a) use of appropriate protection (including personal protective equipment according to part 8 BL), in order to avoid any skin, eyes or personal
  - b) removing possible sources of ignition, providing proper ventilation, control of dust not relevant
  - c) emergency measures, for example necessary evacuation from dangerous area or consultation with an expert not relevant
- 6.1.2 For workers intervening in emergency cases instructions for appropriate materials of personal protective suits (see part 8 BL)
- 6.2 Environmental precautions: Prevent environmental pollution leakage into drains, surface water, groundwater or soil.
- 6.3 Methods and material for containment and cleaning up: Anchor suitable absorbent, transfer to the disposal of the authorized person.
- 6.3.1 Instructions for leak limitation of spilled substance or mixture
  - a) enclose the spilled mixture, cover the canalization;
  - b) seal the damaged package
- 6.3.2 Instructions for removal of spilled substance or mixture

Absorb with appropriate agent, hand over to authorized person for disposal

6.4 Reference to other sections: See also section 7., 8 and 13.

## 7. Section 7: Handling and storage

## 7.1 Measures for safe manipulation:

## 7 1 1 Recomendations:

- a) Workers handeling the product have to get familiar with health and safety rules for work and have to obey these rules. Secure escape routs (enclosing of leaked mixture, sealing of demaged packages and so on), for fire prevention (remove ignition sources, non-sparkling tools and so on) and limit the production of aerosol and dust.
- b) Obey measures for prevention of manipulation with incompatible substances or mixtures (see part 10) in common areas.
- c) Store in original closed packages in temperature from +5 to +25 °C, do not expose to temperature under 0 °C (not even in short term). Do not expose to direct sunlight or other heat sources.
- d) Prevent the contamination of environment, i.e. leak into canalization, surface or underground water and soil.
- 7.1.2 Instructions for general hygiene of work:
  - a) Do not eat, drink or smoke on work areas.
  - b) After working with product wash your hands with soap and water, eventualy use regeneration hand cream.
  - c) Before entering dining areas, remove contaminated clothing and protective equipment.

- 7.2 Conditions for safe storage of substances and mixtures including incompatible substances and mixtures: Store in dry and well-ventilated storages in original closed packages in temperatures from +5 to +25 °C, do not expose to temperature under 0 °C (not even in short term). Do not expose to direct sunlight or other heat sources. Prevent any contact with oxidazing substances, strong acids and bases. Do not store with food, drinks and feed. The product is not a flamable liquid according to ČSN 65 0201.
- 7.3 Specific end use: see part 1.2; coating procedure and recomendations are listed in technical list of the product, or in other product documentation

## 8. Section 8: Exposure controls / personal protection

8.1 Control parameters:

Exposure limits EH40/2005 (WELs):

 Chemical name:
 Methanol

 CAS:
 67-56-1

 Long-term exposure limit [mg/m³] / ppm (TWA/8 h)
 266 / 200

 Short-term exposure limit [mg/m³] / ppm (15 minut)
 333 / 250

Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systematic toxicity.

N-(3-(trimethoxysilyl)propyl)ethylenediamine [ES: 217-164-6]:

DNEL (Workers, Hazard via inhalation route, Systemic effects, Long 260 mg/m³

term exposure)

DNEL (Workers, Hazard via inhalation route, Systemic effects, 260 mg/m<sup>3</sup>

Acute/short term exposure)

DNEL (General Population, Hazard via inhalation route, Systemic 50 mg/m³

effects, Long term exposure)

DNEL (General Population, Hazard via inhalation route, Systemic 50 mg/m³

effects, Acute/short term exposure)

DNEL (General Population, Hazard via oral route, Systemic effects, 8 mg/kg bw/day

Long term exposure)

 PNEC aqua (freshwater)
 0,062 mg/L

 PNEC aqua (marine water)
 0,006 mg/L

 PNEC STP
 25 mg/L

PNEC sediment (freshwater)

PNEC sediment (marine water)

0,22 mg/kg sediment dw

PNEC soil

0,022 mg/kg sediment dw

PNEC soil

0,009 mg/kg soil dw

Methanol [ES: 200-659-6]:

DNEL (Workers, Hazard via inhalation route, Systemic effects, Long 260 mg/m<sup>3</sup>

term exposure)

DNEL (Workers, Hazard via inhalation route, Systemic effects, 260 mg/m<sup>3</sup>

Acute/short term exposure)

DNEL (Workers, Hazard via inhalation route, Local effects, Long term  $\,$  260  $\,$ mg/m $^3$ 

exposure)

DNEL (Workers, Hazard via inhalation route, Local effects, 260 mg/m<sup>3</sup>

Acute/short term exposure)

DNEL (Workers, Hazard via dermal route, Systemic effects, Long 40 mg/kg bw/day

term exposure)

DNEL (Workers, Hazard via dermal route, Systemic effects, 40 mg/kg bw/day

Acute/short term exposure)

DNEL (General Population, Hazard via inhalation route, Systemic 50 mg/m<sup>3</sup>

effects, Long term exposure)

DNEL (General Population, Hazard via inhalation route, Systemic 50 mg/m<sup>3</sup>

effects, Acute/short term exposure)

DNEL (General Population, Hazard via inhalation route, Local effects, 50 mg/m³

Long term exposure)

DNEL (General Population, Hazard via inhalation route, Local effects, 50 mg/m<sup>3</sup>

Acute/short term exposure)

DNEL (General Population, Hazard via dermal route, Systemic 8 mg/kg bw/day

effects, Long term exposure)

DNEL (General Population, Hazard via dermal route, Systemic 8 mg/kg bw/day

effects, Acute/short term exposure)

DNEL (General Population, Hazard via oral route, Systemic effects, 8 mg/kg bw/day

Long term exposure)

DNEL (General Population, Hazard via oral route, Systemic effects, 8 mg/kg bw/day

Acute/short term exposure)

PNEC aqua (freshwater) 20,8 mg/L
PNEC aqua (marine water) 2,08 mg/L
PNEC STP 100 mg/L

PNEC sediment (freshwater) 77 mg/kg sediment dw PNEC sediment (marine water) 7,7 mg/kg sediment dw

PNEC soil

### 8.2 Exposure controls

Ensure adequate ventilation (methanol and ethanol are released during drying)!!! Ensure protective equipment is worn while working with the product. Contaminated work clothes can be reused after thorough cleaning. Wash your hands and face with soap and water after use. Do not eat, drink or smoke while working with the product.

- 8.2.1 Appropriate engineering controls: Observe the usual precautions to protect the health and well-ventilated.
- 8.2.2 Individual protection measures, such as personal protective equipment:

Occupational exposure is governed by Directive 89/686/EEC therefore any use of personal protective equipment must be in accordance with this Regulation.

- a) Eyes and face protection: Suitable safety goggles (EN 166), face shiled.
- b) Skin protection: Common safety clothing with long sleave and shoes; take of the contaminated clothing and wash your skin with soap and water.
- b-1) Hands protection: suitable protective gloves (made from rubber according to EN 374), wash your hands with soap and water after work, use reparing hand cream.
- c) Airways protection: with proper area ventilation not required. When spraying, face half-shiled is recomended for gass filtration (EN 405) or quarter-shiled with gass filter (EN 140, EN 141).

Not specified

- d) Heat hazard: Special attention must be paid to construction of personal protective measures, when specifying protective measures for protection against materials, which are considered to be heat hazard. Not relevant for this product.
- 8.2.3 Environmental exposure controls: Avoid infiltration of surface and groundwater and soil.

## 9. Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) State low viscosity liquid b) Color color shown on the cover

c) Odour: characteristic of acrylic dispersion

d) Melting/Freezing point (temperature range) (°C):

Not specified
e) Boiling point or initial boiling point and boiling range (°C)

Not specified

f) Combustibility: non-flammable liquid

g) Explosion limits: upper limit (% volume):

Not specified

lower limit (% volume):

Not specified

h) Point of ignition:

Not specified

i) Temperature of self-ignition:

Not specified

Not specified

Not specified

Not specified

j) Temperature of decomposition (°C):

k) pH

9,5 - 11,5

Not specified

9,5 - 11,5

Not specified

m) Solubility (23 °C)

Odor threshold:

- with water: unlimited miscibility
- with fats: Not specified

n) Partition coefficient n - octanol/water:

Not specified
o) Steam pressure (20 °C):

Not specified

p) Density and/or relative density (20 °C): approximately 1,10 - 1,30 g.cm<sup>-3</sup>

q) Relative viscosity of steam (at °C): Not specified r) Particles characteristics: Not specified

9.2 Other information:

9.2.1 Information about class of physical hazard: is not relevant

9.2.2 Other safety characteristics

Evaporation rate: Not specified Dynamic viscosity: Not specified

Explosive properties: Not specified Not specified Oxidizing properties: VOC (g/L)

#### 10. Section 10: Stability and reactivity

Product is stable under recommended storage and handling conditions.

- 10.1 Reactivity: Product is not reactive under recommended storage and handling conditions. Otherwise see 10.5.
- 10.2 Chemical stability: Product is stable under recommended storage and handling conditions.
- 10.3 Possibility of hazardous reactions: In case of contact with water (moisture), hydrolysis liberates methanol and ethanol.
- 10.4 Conditions to avoid: Contact with water (moisture). Measurements have shown that at temperatures around 150 °C, a small amount of formaldehyde is cleaved by oxidative degradation. Experiments have shown that a small amount of benzene is cleaved at temperatures around 180 °C.
- 10.5 Incompatible materials: Substances reacting with water (the reaction proceeds with the formation of methanol and ethanol), basic substances and acids.
- 10.6 Hazardous Decomposition Products: Burning may produce carbon oxides and nitrogen oxides.

#### 11. Section 11: Toxicological information

11.1 Information about hazard classes acording to (ES) č. 1272/2008

a) Acute toxicity:

- LD<sub>50</sub>, oral, rat (mg.kg<sup>-1</sup>):

- LD<sub>50</sub>, dermal, rat or rabbit (mg.kg<sup>-1</sup>):

- LC<sub>50</sub>, inhalation, rat, for aerosols or particles (mg.kg<sup>-1</sup>):

- LC<sub>50</sub>, inhalation, rat, for gases and vapours (mg.kg<sup>-1</sup>):

b) corrosivity/skin irritation:

c) serious eye damage / eyes irritation:

d) sensitivity of airways / sensitivity of skin:

e) germ cells mutagenicity:

f) carcinogenicity:

g) toxicity for reproduction:

h) toxicity for specific organs - single exposure:

i) toxicity for specific organs - multiple exposures:

j) hazards while inhaled:

Human experience:

Tests on animals:

11.1.1 Information for each hazard class or breakdown:

11.1.2 Toxicological properties of mixture

N-(3-(trimetoxysilyl)propyl)ethylenediamine [ES: 217-164-6] and

methanol [ES: 200-659-6] If enough information from substance/mixture trials exist, it might be

necessary to sum up results of used studies, for example according

to exposure run

11.1.4 If the classification criteria are not met for specific hazard class, information explaining the justification should be stated.

11.1.5 Information about likely exposure run

11.1.6 Symptoms corresponding to physical, chemical and toxicological features

11.1.7 Belated and immediate effects and chronical effects of short/long

term exposure 11.1.8 Interactive effects

11.1.9 Lack of specific data

11.1.10 Mixtures

11.1.11 Mixtures information compared to substance information

- 1) Substances in the mixture can react with each other inside of a body and can cause different levels of absorption, metabolism and
- 2) It is necessary to consider, if concentration of each substance is sufficient to contribute to mixture's effects on health. For each substance

a) if the information are doubled, they are listed only once for a substance as a whole, for example when two different substances are

causing vomiting and diarrhea;

the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information. the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information Causes serious eye damage.

May cause an allergic skin reaction.

the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information the classification cirteria are not met based on avilable information. No detrimental effects were found upon compliance with the prescribed safety measures.

Were not performed

see above not avilable

see part 8

not relevant

relevant concentration limits were not exceeded

see part 11.1

see part 11.1

see part 11.1

unknown

see part 8

not relevant

Not relevant for this mixture.

b) if it is not likely the effects will appear with current concentrations, for example when weak irritating substance is disolved in non-irritating solution to a level under certain concentration:

Not relevant for this mixture.

c) if the information about mutual effects of substances in the mixture see part 8 are unavilable, no assumptions will be listed and instead effects on

healtf of each substance will be listed.

11.1.12 Additional data:

None

11.2 Other hazards information

11.2.1 Features causing disruption of endocrinal systém Not relevant for this mixture.

11.2.2 Other information None

## 12. Section 12: Ecological information

12.1 Toxicity

12.2

12.3

12.5

Acute toxicity for water organisms:

 $\begin{array}{lll} - LC_{50}, 96 \text{ hours, fish (mg/kg):} & \text{Not set} \\ - LC_{50}, 48 \text{ hours, fish (mg/kg):} & \text{Not set} \\ - IC_{50}, 72 \text{ hours, algae (mg/kg):} & \text{Not set} \\ \text{Persistence and degradability:} & \text{Not set} \\ \text{Bioaccumulative potential:} & \text{Not set} \\ \end{array}$ 

12.4 Mobility in soil: It was not determined, the blend is miscible with water.

The mixture does not meet the criteria for classification as PBT or

vPvB

12.6 Features causing disruption of endocrinal system Unknown for this mixture

12.7 Other adverse effects: See Section 2

Additional data: The product must not leak to surface and groundwater. Notify

competent authorities immediately in case of accident.

## 13. Section 13: Disposal considerations

13.1 Methods of waste management:

Results of PBT and vPvB

- a) Appropriate methods of substance, mixture and contaminated packaging disposal: Product remnants and packaging with product remnants must be incinerated in a hazardous waste incinerator or kept at a hazardous waste landfill. Waste code according to the Commission Decision 2000/532/EC (waste catalog) 08 01 11, 08 01 19 or 20 01 27.
- b) Physical / chemical properties that can affect means of waste handling: Liquid mixture is completely miscible with water. If in contact with water, the product undergoes hydrolysis and releases methanol and ethanol.
- c) Avoidance of disposal through sewer: It is necessary to prevent leakage of both components and hardened mixture into drains.
- d) Special precautions for the recommended waste management: Avoid contact with skin and eyes.

### 14. Section 14: Transport information 14.1 UN number or ID number Not specified Required shipping label: ADR/RID/ADN: Not specified IMDG: Not specified ICAO TI: Not specified 14.2 UN proper shipping name: Ground transport ADR/RID/ADN: Not specified Naval transport IMDG: Not specified Air transport ICAO TI: Not specified 14.3 Transport hazard class(es): ADR/RID/ADN: Not specified IMDG: Not specified ICAO TI: Not specified 14.4 Packing group: ADR/RID/ADN: Not specified IMDG: Not specified ICAO TI: Not specified 14.5 Environmental hazards: Not specified 14.6 Special precautions for user: See Section 8

Special provisions (ADR):

Not specified

Naval mass-transport according to instrumenst IMO:

Not applicable

Notes: None Additional data: None

## 15. Section 15: Regulatory information

14.7

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

Regulation of the European Parliament and Council Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals establishing a European Chemicals Agency, as amended

Regulation of the European Parliament and Council Regulation (EC) No 1272/2008 (CLP) as amended

Commision directive (EU) no. 878/2020

EH40/2005 Workplace exposure limits (second edition, published 2011). Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended)

15.2 Assessment chemical safety of mixture: Were not performed

## 16. Section 16: Other informations

Information stated in this safety data sheet is based on the current knowledge of EU legislation. It is recommendation in terms of health and safety as well as recommendation related to ecological matters that are essential to safe usage of the product.

- a) New edition.
- b) key or legend for abbreviations and accronyms used in the safety data sheet:
- LD<sub>50</sub> The lethal dose for 50 % mortality of the test population relative to a control sample.
- LC<sub>50</sub> Lethal concentration for 50 % mortality of the test population relative to a control sample.
- EC<sub>50</sub> Effective concentration for 50 % mortality of the test population relative to a control sample.
- EC<sub>10</sub> Effective concentration for 10 % mortality of the test population relative to a control sample.
- IC<sub>50</sub> Inhibitory concentration to reduce the growth or growth rate of 50% of the test population relative to a control sample.
- Lethal loading doses of test substance resulting in 50% mortality
- EL<sub>50</sub> Effective loading doses of test substance resulting in 50% mortality
- PBT Persistent, bioaccumulative and toxic substances.
- vPvB Very persistent and very bioaccumulative substances.
- DNEL Derived No Effect Level derived concentration of the substance without adverse effects

  DMEL Derived Minimum Effect Level derived minimum level at which the adverse effects
- NOAEL No Observed Adverse Effect Level no negative effect was observed
- PNEC Predicted No Effect Concentration an estimate of the concentration of the substance without adverse effects
- NOELR No Observed Effect Loading Rate dosage rate without observed effect NOEC No Observed Effect Concentration concentration without observed effect
- NOEL No Observed Effect Level level without observed effect
- LOEC Lowest Observed Effect Concentration lowest concentrations with observable effects

  ADR European Agreement concerning the international carriage of dangerous goods by road.
- RID Regulations concerning the international carriage of dangerous goods by rail.
- IMDG International maritime code of dangerous goods.
- ICAO The International Civil Aviation Organization.
- IATA International Air Transport Association.
- GHS Globally Harmonized System of Classification and Labelling of Chemical substances.
- c) important references to literature and data sources

Initial data sources are safety data sheets of the inherent (components).

d) in case of mixture, statement about evaluation method used for classification according to article 9 of directive (ES) number 1272/2008 For evaluation purposes, principles of extrapolation were used. Calculation methods.

e) List of H-sentences, whose full form is not listed in other parts.

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.H311 Toxic in contact with skin.

H317 May cause an allergic skin reaction.

| H318 | Causes serious eye damage.        |
|------|-----------------------------------|
| H331 | Toxic if inhaled.                 |
| H335 | May cause respiratory irritation. |
| H370 | Causes damage to organs.          |
| H371 | May cause damage to organs.       |

## Guidelines for training:

As required by national legislation.

Recommended restrictions on use (i. e. non-statutory recommendations by supplier):

Product should not be used for other purposes than specified (see section 1.2). Because specific conditions of use are beyond supplier's control it is responsibility of the user to adapt notifications to local law and regulations. Safety information describe the product with regard to safety and can not be considered technical information about the product.