



Safety Data Sheet

DETAROX AP

Safety Data Sheet dated 27/9/2019, version 13

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

1.1. Product identifier

Mixture identification:

Trade name: DETAROX AP

Trade code: 251320 - 251324 - 251330

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

Recommended use:

SU 3 Industrial Use

SU 4 Food Industry

SU22 Professional Use

1.3. Details of the supplier of the safety data sheet

Company:

PERDOMINI-IOC S.p.A.

Via Salvo D'Acquisto, 2

37036 S. Martino B.A. (Verona)

Tel. +39 045 8788611 - Fax +39 045 8780322

Competent person responsible for the safety data sheet:

info@perdomini-ioc.com








1.4. Emergency telephone number

112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

-  Warning, Met. Corr. 1, May be corrosive to metals.
-  Danger, Self-react. C, Heating may cause a fire.
-  Warning, Acute Tox. 4, Harmful if swallowed.
-  Warning, Acute Tox. 4, Harmful if inhaled.
-  Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.
-  Warning, STOT SE 3, May cause respiratory irritation.
-  Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

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Danger

Hazard statements:

H290 May be corrosive to metals.

H242 Heating may cause a fire.

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P220 Keep away from clothing and other combustible materials.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P370+P378 In case of fire: Use nebulized water to extinguish.

P390 Absorb spillage to prevent material damage.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P411 Store at temperatures not exceeding 35 °C/ 95°F.

P501 Dispose of contents/container to legislation in force

Special Provisions:

EUH071 Corrosive to the respiratory tract.

Contains

peracetic acid 5-6 %

hydrogen peroxide solution %

acetic acid %

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

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.














3.2. Mixtures

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

| Qty | Name | Ident. Number | Classification |
|-------------------|---------------------------------|--|--|
| >= 20% - < 25% | hydrogen peroxide solution % | Index 008-003-00-9 number: CAS: 7722-84-1 EC: 231-765-0 REACH No.: 01-21194858 45-22-XXXX | 2.13/1 Ox. Liq. 1 H271 3.8/3 STOT SE 3 H335 4.1/C3 Aquatic Chronic 3 H412 3.1/4/Inhal Acute Tox. 4 H332 |

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| | | | |
|-------------------|------------------|---|--|
| | | |  3.1/4/Oral Acute Tox. 4 H302  3.2/1A Skin Corr. 1A H314 |
| >= 10% - < 15% | acetic acid % | Index number: 607-002-00-6 CAS: 64-19-7 EC: 200-580-7 REACH No.: 01-21194753 28-30-xxxx |  2.6/3 Flam. Liq. 3 H226  3.2/1A Skin Corr. 1A H314 |
| >= 5% - < 10% | peracetic acid % | Index number: 607-094-00-8 CAS: 79-21-0 EC: 201-186-8 REACH No.: 01-21195313 30-56-0002 |  2.6/3 Flam. Liq. 3 H226  3.1/3/Oral Acute Tox. 3 H301  4.1/C1 Aquatic Chronic 1 H410  3.8/3 STOT SE 3 H335  2.15/D Org. Perox. D H242  3.2/1A Skin Corr. 1A H314  4.1/A1 Aquatic Acute 1 H400  3.1/4/Dermal Acute Tox. 4 H312  3.1/4/Inhal Acute Tox. 4 H332 EUH071 |

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

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

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In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Where appropriate artificial ventilation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire: Use ... to extinguish.

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

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 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

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.

Use localized ventilation system.

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

Always keep in a well ventilated place.

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Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

Keep away from combustible materials.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

hydrogen peroxide solution ... % - CAS: 7722-84-1

ACGIH - TWA(8h): 1 ppm - Notes: A3 - Eye, URT, and skin irr

acetic acid % - CAS: 64-19-7

EU - TWA(8h): 25 mg/m³, 10 ppm - STEL: 50 mg/m³, 20 ppm

ACGIH - TWA(8h): 10 ppm - STEL: 15 ppm - Notes: URT and eye irr, pulm func

peracetic acid % - CAS: 79-21-0

ACGIH - STEL: 0.4 ppm - Notes: (IFV), A4 - URT, eye, and skin irr

DNEL Exposure Limit Values

hydrogen peroxide solution ... % - CAS: 7722-84-1

Worker Professional: 0.1 03 - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 0.05 03 - Exposure: Human Inhalation - Frequency: Long Term, local effects

acetic acid % - CAS: 64-19-7

Worker Professional: 25 03 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 25 03 - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Professional: 25 03 - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 25 03 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Consumer: 25 03 - Exposure: Human Inhalation - Frequency: Short Term, local effects

peracetic acid % - CAS: 79-21-0

Worker Professional: 0.6 03 - Exposure: Human Inhalation

PNEC Exposure Limit Values

hydrogen peroxide solution % - CAS: 7722-84-1

Target: Freshwater sediments - Value: 0.047 mg/kg

Target: Marine water sediments - Value: 0.047 mg/kg

Target: Soil (agricultural) - Value: 0.0023 mg/kg

Target: Fresh Water - Value: 0.0126 mg/l

Target: Marine water - Value: 0.0126 mg/l

acetic acid ... % - CAS: 64-19-7

Target: Fresh Water - Value: 3.058 mg/l

Target: Freshwater sediments - Value: 11.36 mg/kg

Target: Marine water - Value: 0.3508 mg/l

Target: Marine water sediments - Value: 1.136 mg/kg

Target: Soil (agricultural) - Value: 0.478 mg/kg

Target: Microorganisms in sewage treatments - Value: 85 mg/l

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peracetic acid % - CAS: 79-21-0

Target: Fresh Water - Value: 0.00024 mg/l

Target: Freshwater sediments - Value: 0.00018 mg/l

Target: Soil (agricultural) - Value: 0.320 mg/kg

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Respiratory protection:

Gas filtering device (DIN EN 141).

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Properties | Value | Method: | Notes: |
|---|-----------------------|---------|--------|
| Appearance and colour: | Liquid | -- | -- |
| Odour: | typical | -- | -- |
| Odour threshold: | n.d. | -- | -- |
| pH: | 3,25 | -- | -- |
| Melting point / freezing point: | - 73°C | -- | -- |
| Initial boiling point and boiling range: | > 100 °C | -- | -- |
| Flash point: | 74°C - 83°C | -- | -- |
| Evaporation rate: | n.a. | -- | -- |
| Solid/gas flammability: | > 218°C a 1006 hPA | -- | -- |
| Upper/lower flammability or explosive limits: | > 80°C | -- | -- |
| Vapour pressure: | 17 hPa a 20°C | -- | -- |
| Vapour density: | >1 (aria=1) | -- | -- |
| Relative density: | 1.150 | -- | -- |
| Solubility in water: | soluble | -- | -- |
| Solubility in oil: | > 500 g/l | -- | -- |
| Partition coefficient (n-octanol/water): | 1.25 logPow | -- | -- |
| Auto-ignition temperature: | n.a. | -- | -- |
| Decomposition | n.a. | -- | -- |

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| | | | |
|-----------------------|--------------------------|----|----|
| temperature: | | | |
| Viscosity: | 1.500 mm ² /s | -- | -- |
| Explosive properties: | absent | -- | -- |
| Oxidizing properties: | | -- | -- |

9.2. Other information

| Properties | Value | Method: | Notes: |
|--------------------------------------|--------------|---------|--------|
| Miscibility: | n.a. | -- | -- |
| Fat Solubility: | si | -- | -- |
| Conductivity: | n.a. | -- | -- |
| Substance Groups relevant properties | Organic acid | -- | -- |

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

10.3. Possibility of hazardous reactions

It may generate toxic gases on contact with acids, amides, aliphatic and aromatic amines, carbamates, halogenated organic substances, isocyanates, organic sulphides, nitriles, organophosphates, inorganic sulphides, and polymerisable substances.

It may catch fire on contact with other substances.

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

hydrogen peroxide solution ... % - CAS: 7722-84-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 694 mg/kg - Notes: Maschio

Test: LD50 - Route: Oral - Species: Rat 1270 mg/kg - Notes: Femmina

Test: LD50 - Route: Skin - Species: Rabbit > 6500 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 0.17 mg/l - Duration: 4h

acetic acid % - CAS: 64-19-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 3530 mg/kg

Test: LC50 - Route: Inhalation - Species: Mouse > 16000 mg/kg - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 1900 mg/kg

peracetic acid % - CAS: 79-21-0

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 1000 mg/kg

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Test: LD50 - Route: Inhalation - Species: Rat > 500 mg/kg - Duration: 4h

Test: LD50 - Route: Skin - Species: Rabbit > 1900 mg/kg

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit

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Acido peracetico 15%

Ingestione: LD50(dose letale-ratto) = 330 mg/kg

Inalazione: LC50(conc. letale-ratto) = 0.3 mg/l/1h

Contatto: LD50 (dose letale-ratto) > 12000 mg/kg

Acido acetico

Ingestione: LD50(dose letale-ratto) = 3310 mg/kg

Inalazione: LC50(conc. letale-ratto) = 11.4 mg/l/4h

Contatto: LD50 (dose letale-ratto) = 1060 mg/kg

Perossido d'idrogeno 35%

Ingestione: LD50(dose letale-ratto) = 1232 mg/kg

Inalazione: LC50(conc. letale-ratto) = 2 mg/l/4h

Contatto: LD50 (dose letale-ratto) > 2000 mg/kg

peracetic acid % - CAS: 79-21-0

LD50 (RAT) ORAL: 1540 MG/KG

LD50 (RABBIT) SKIN: 1410 MG/KG

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Acido peracetico 15%

EC100 (streptococcus fec./60min) = 50 mg/l

EC50 (daphnia magna/48h) = 3.3 mg/l

LC50 (pesci/24h) = 22 mg/l

Acido acetico

EC10 (pseudomonas putida/30min) = 1000 mg/l

EC50 (daphnia magna/24h) = 95 mg/l

LC50 (pesci/48h) = 410 mg/l

Perossido d'idrogeno 35%

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EC10 (pseudomonas putida/16min) = 11 mg/l

EC50 (daphnia magna/24h) = 7.7 mg/l

LC50 (pesce/96h) = 16.4 mg/l

hydrogen peroxide solution % - CAS: 7722-84-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 16.4 mg/l - Duration h: 96

Endpoint: NOEC - Species: Daphnia = 0.63 mg/l - Duration h: 21

Endpoint: NOEC - Species: Algae = 0.63 mg/l - Duration h: 72

Endpoint: NOEC = 466 mg/l - Duration h: 0.5

acetic acid ... % - CAS: 64-19-7

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae > 300 mg/l - Duration h: 72

Endpoint: EC50 - Species: Daphnia > 300 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish > 300 mg/l - Duration h: 96

peracetic acid % - CAS: 79-21-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae = 0.16 mg/l

Endpoint: EC50 - Species: Daphnia = 0.73 mg/l

12.2. Persistence and degradability

None

acetic acid % - CAS: 64-19-7

Biodegradability: Readily biodegradable

peracetic acid % - CAS: 79-21-0

Biodegradability: Readily biodegradable

12.3. Bioaccumulative potential

acetic acid % - CAS: 64-19-7

Bioaccumulation: Not bioaccumulative

peracetic acid % - CAS: 79-21-0

Bioaccumulation: Not bioaccumulative

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Additional disposal information:

Do not dispose the product together with urban waste and do not put it in the sewer system.

Both the product and the related empty packaging must be managed as special waste in compliance with the legislation in force, favoring, where possible, recovery operations with respect to disposal operations.

SECTION 14: Transport information

14.1. UN number

ADR-UN number: 3109

IATA-Un number: 3109

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- 14.2. UN proper shipping name
ADR-Shipping Name: ORGANIC PEROXIDE TYPE F, LIQUID (peroxyacetic / peracetic acid, stabilized)
- 14.3. Transport hazard class(es)
ADR-Class: 5.2 (8)
IATA-Class: 5.2
- 14.4. Packing group
ADR-Packing Group: II
- 14.5. Environmental hazards
Marine pollutant: Marine pollutant
- 14.6. Special precautions for user
ADR-Tunnel Restriction Code: D
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No

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) 2015/830
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)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
None

Where applicable, refer to the following regulatory provisions :
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
Product belongs to category: E2

- 15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Text of phrases referred to under heading 3:
H271 May cause fire or explosion; strong oxidiser.

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H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
H332 Harmful if inhaled.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H410 Very toxic to aquatic life with long lasting effects.
H242 Heating may cause a fire.
H400 Very toxic to aquatic life.
H312 Harmful in contact with skin.
EUH071 Corrosive to the respiratory tract.

| Hazard class and hazard category | Code | Description |
|----------------------------------|--------------|--|
| Ox. Liq. 1 | 2.13/1 | Oxidising liquid, Category 1 |
| Org. Perox. D | 2.15/D | Organic peroxide, Type D |
| Met. Corr. 1 | 2.16/1 | Substance or mixture corrosive to metals, Category 1 |
| Flam. Liq. 3 | 2.6/3 | Flammable liquid, Category 3 |
| Self-react. C | 2.8/C | Self-reactive substance or mixture, Type C |
| Acute Tox. 3 | 3.1/3/Oral | Acute toxicity (oral), Category 3 |
| Acute Tox. 4 | 3.1/4/Dermal | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 | 3.1/4/Inhal | Acute toxicity (inhalation), Category 4 |
| Acute Tox. 4 | 3.1/4/Oral | Acute toxicity (oral), Category 4 |
| Skin Corr. 1A | 3.2/1A | Skin corrosion, Category 1A |
| STOT SE 3 | 3.8/3 | Specific target organ toxicity - single exposure, Category 3 |
| Aquatic Acute 1 | 4.1/A1 | Acute aquatic hazard, category 1 |
| Aquatic Chronic 1 | 4.1/C1 | Chronic (long term) aquatic hazard, category 1 |
| Aquatic Chronic 3 | 4.1/C3 | Chronic (long term) aquatic hazard, category 3 |

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 4: First aid measures
SECTION 5: Firefighting measures
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SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties
SECTION 11: Toxicological information
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SECTION 13: Disposal considerations
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SECTION 16: Other information

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

| Classification according to Regulation (EC) Nr. 1272/2008 | Classification procedure |
|---|--------------------------|
| Met. Corr. 1, H290 | On basis of test data |
| Self-react. C, H242 | On basis of test data |
| Acute Tox. 4, H302 | Calculation method |
| Acute Tox. 4, H332 | Calculation method |
| Skin Corr. 1A, H314 | Calculation method |
| STOT SE 3, H335 | Calculation method |
| Aquatic Chronic 1, H410 | 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.

| | |
|-------------|--|
| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road. |
| ATE: | Acute Toxicity Estimate |
| ATEmix: | Acute toxicity Estimate (Mixtures) |
| CAS: | Chemical Abstracts Service (division of the American Chemical Society). |
| CLP: | Classification, Labeling, Packaging. |
| DNEL: | Derived No Effect Level. |
| EINECS: | European Inventory of Existing Commercial Chemical Substances. |
| GefStoffVO: | Ordinance on Hazardous Substances, Germany. |
| GHS: | Globally Harmonized System of Classification and Labeling of Chemicals. |
| IATA: | International Air Transport Association. |
| IATA-DGR: | Dangerous Goods Regulation by the "International Air Transport Association" (IATA). |
| 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. |
| KSt: | Explosion coefficient. |
| LC50: | Lethal concentration, for 50 percent of test population. |
| LD50: | Lethal dose, for 50 percent of test population. |
| PNEC: | Predicted No Effect Concentration. |
| RID: | Regulation Concerning the International Transport of Dangerous Goods by Rail. |

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|-------|---------------------------------|
| STEL: | Short Term Exposure limit. |
| STOT: | Specific Target Organ Toxicity. |
| TLV: | Threshold Limiting Value. |
| TWA: | Time-weighted average |
| WGK: | German Water Hazard Class. |