

Safety Data Sheet

TERACLEAN



Safety Data Sheet dated 29/4/2016, version 1
In compliance with Regulation (EC) 2015/830

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

1.1. Product identifier

Mixture identification:

Trade name: TERACLEAN
Product type: Caustic cleaner

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

Recommended use:

Washing and cleaning products (including solvent based products)

Uses advised against:

Not available

1.3. Details of the supplier of the safety data sheet

Supplier:

AirChem Consumables, LOB 10, Office # 10F14, JAFZA, Dubai, UAE- Tel: +971-4-881 8084, Fax: +971-4-881 6022, Email: airacc@acc.ae

Competent person responsible for the safety data sheet:

airacc@acc.ae

1.4. Emergency telephone number

AirChem Consumables, Tel: +971-4-881 8084, Fax: +971-4-881 6022, Email: airacc@acc.ae (from Sunday to Thursday from 09 AM to 6 PM; Saturdays 09 AM to 2:30 PM)




A list of Poison Control Centers is available at the following link:

http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

-  Warning, Acute Tox. 4, Harmful if swallowed.
-  Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.
-  Danger, Eye Dam. 1, Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

The product is harmful following acute exposure to it and poses a serious health threat if ingested.

The product is highly corrosive and, if brought into contact with the skin, causes serious burning, with the rapid destruction of the entire thickness of skin tissue.

2.2. Label elements

EC regulation criteria 1272/2008 (CLP)

Hazard pictograms:



Danger

Hazard statements:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary statements:

P264 Wash the skin thoroughly after handling.
P280 Wear protective gloves/clothing and eye/face protection.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
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 or doctor.
P501 Dispose of contents/container in accordance with applicable regulations.

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Special Provisions:

None

Contents:

Potassium hydroxide

Sodium nitrite

Tetrasodium-ethylenediaminetetraacetate

Etidronic 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




Not applicable

3.2. Mixtures

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




20-30 % Potassium hydroxide

REACH N° 01-2119487136-33-XXXX, Index number: 019- 002-00-8, CAS: 1310-58-3, EC: 215-181-3

-  2.16/1 Met. Corr. 1 H290
-  3.2/1A Skin Corr. 1A H314
-  3.1/4/Oral Acute Tox. 4 H302




1-5 % Tetrasodium-ethylenediaminetetraacetate

REACH N° 01-2119486762-27-XXXX, Index number: 607- 428-00-2, CAS: 64-02-8, EC: 200-573-9

-  3.1/4/Inhal Acute Tox. 4 H332
-  3.1/4/Oral Acute Tox. 4 H302
-  3.3/1 Eye Dam. 1 H318





1-5 % Etidronic acid

REACH N° 01-2119510391-53-XXXX, CAS: 2809-21-4, EC : 220-552-8

-  3.1/4/Oral Acute Tox. 4 H302
-  2.16/1 Met. Corr. 1 H290
-  3.3/1 Eye Dam. 1 H318




0.1-1 % Sodium nitrite

REACH N° 01-2119471836-27-XXXX, Index number: 007- 010-00-4, CAS: 7632-00-0, EC: 231-555-9

-  2.14/3 Ox. Sol. 3 H272
-  3.3/2 Eye Irrit. 2 H319
-  4.1/A1 Aquatic Acute 1 H400
-  3.1/3/Oral Acute Tox. 3 H301

0.1-1 % Trisodium nitrilotriacetate

Index number: 607-620-00-6, CAS: 5064-31-3, EC: 225-768-6

-  3.6/2 Carc. 2 H351
-  3.3/2 Eye Irrit. 2 H319
-  3.1/4/Oral Acute Tox. 4 H302

Declaration of ingredients according to Detergent Regulation 648/2004:
phosphonates, EDTA and salts, NTA (nitrilotriacetic acid) and < 5 %
salts

For the complete text of the hazard and risk phrases refer to paragraph 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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:

Remove casualty to fresh air and keep warm and at rest.

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

None

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:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

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.

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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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

For more information see Technical data bulletin

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contained substances

Potassium hydroxide - CAS: 1310-58-3

ACGIH - STE mg/m³(15min): C 2 - STE ppm: C 0.87 - Behaviour: Binding - Critical effects: C irritation of the skin, respiratory and eye.

EU - LTE mg/m³(8h): 2 - STE mg/m³(15min): 2 - STE ppm: 0.87 - Behaviour: Binding

DNEL Exposure Limit Values

Potassium hydroxide - CAS: 1310-58-3

Worker Professional: 1 mg/m³ - Consumer: 1 - U.M.: mg/m³ - Exposure: Human

Inhalation - Frequency: Long Term, local effects

Tetrasodium-ethylenediaminetetraacetate - CAS: 64-02-8

Consumer: 25 - U.M.: mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 2.5 mg/m³ - Consumer: 1.5 - U.M.: mg/m³ - Exposure:

Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 2.5 mg/m³ - Consumer: 1.5 - U.M.: mg/m³ - Exposure:

Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 2.5 mg/m³ - Consumer: 1.5 - U.M.: mg/m³ - Exposure:

Human Inhalation - Frequency: Long Term, local effects

Worker Professional: 2.5 mg/m³ - Consumer: 1.5 - U.M.: mg/m³ - Exposure:

Human Inhalation - Frequency: Long Term, systemic effects

Etidronic acid - CAS: 2809-21-4

Worker Professional: 13 mg/kg - Consumer: 6.5 - U.M.: mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Trisodium nitrilotriacetate - CAS: 5064-31-3

Consumer: 0.9 - U.M.: mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

Consumer: 0.3 - U.M.: mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Worker Professional: 9.6 mg/m³ - Consumer: 2.4 - U.M.: mg/m³ - Exposure:

Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 3.2 mg/m³ - Consumer: 0.8 - U.M.: mg/m³ - Exposure:

Human Inhalation - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Tetrasodium-ethylenediaminetetraacetate - CAS: 64-02-8

Target: Marine water - Value: 0.22 mg/l

Target: Fresh Water - Value: 2.2 mg/l

Target: Occasional issue - Value: 1.2 mg/l

Target: Sewerage treatment plants - Value: 43 mg/l

Target: Soil - Value: 0.72 mg/kg

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- Etidronic acid - CAS: 2809-21-4
 - Target: Marine water - Value: 0.0136 mg/l
 - Target: Fresh Water - Value: 0.136 mg/l
 - Target: Marine water sediments - Value: 5.9 mg/kg
 - Target: Freshwater sediments - Value: 59 mg/kg
 - Target: Sewerage treatment plants - Value: 20 mg/l
 - Target: Soil - Value: 96 mg/kg
- Sodium nitrite - CAS: 7632-00-0
 - Target: Fresh Water - Value: 0.0054 mg/l
 - Target: Marine water - Value: 0.00616 mg/l
 - Target: Occasional issue - Value: 0.0054 mg/l
 - Target: Freshwater sediments - Value: 0.0195 mg/kg
 - Target: Marine water sediments - Value: 0.0223 mg/l
 - Target: Sewerage treatment plants - Value: 21 mg/l
 - Target: Soil - Value: 0.000733 mg/kg
- Trisodium nitrilotriacetate - CAS: 5064-31-3
 - Target: Marine water - Value: 0.093 mg/l
 - Target: Fresh Water - Value: 0.93 mg/l
 - Target: Occasional issue - Value: 0.8 mg/l
 - Target: Sewerage treatment plants - Value: 270 mg/l

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

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

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

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: | Clear yellow liquid | -- | -- |
| Odour: | None | -- | -- |
| Odour threshold: | na mg/m3 | -- | -- |
| pH: | 13 | -- | -- |
| Melting point / freezing point: | initial 0 °C | -- | -- |
| Initial boiling point and boiling range: | initial 100 °C | -- | -- |

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| | | | |
|---|---------------|----|----|
| Flash point: | None °C | -- | -- |
| Evaporation rate: | na | -- | -- |
| Solid/gas flammability: | na | -- | -- |
| Upper/lower flammability or explosive limits: | na % v/v | -- | -- |
| Vapour pressure: | 3.2 kPa | -- | -- |
| Vapour density (air=1): | > 1 | -- | -- |
| Relative density: | 1.3 g/ml | -- | -- |
| Solubility in water: | Complete | -- | -- |
| Solubility in oil: | na | -- | -- |
| Partition coefficient (n-octanol/water): | n.av. | -- | -- |
| Auto-ignition temperature: | none °C | -- | -- |
| Decomposition temperature: | n.av. °C | -- | -- |
| Viscosity: | n.av. mPa.s | -- | -- |
| Explosive properties: | Not explosive | -- | -- |
| Oxidizing properties: | Not Oxidant | -- | -- |

9.2. Other information

| Properties | Value | Method: | Notes: |
|---------------------------------------|-------------------|---------|--------|
| Miscibility: | Complete in water | -- | -- |
| Fat Solubility: | na | -- | -- |
| Conductivity: | n.av. | -- | -- |
| Substance Groups relevant properties: | n.av. | -- | -- |

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with halogenated organic substances, and elementary metals.

10.4. Conditions to avoid

Stable under normal conditions.

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- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

Not applicable

Toxicological information of the main substances found in the mixture:

Potassium hydroxide - CAS: 1310-58-3

Type: a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat - Op.: = - Value: 333 - U.M.: mg/kg

Tetrasodium-ethylenediaminetetraacetate - CAS: 64-02-8

Type: a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat - Op.: = - Value: 2581 - U.M.: mg/kg

Test: LD50 - Route: Oral - Species: Rat - Op.: < - Value: 2000 - U.M.: mg/kg

Test: LD50 - Route: Oral - Species: Rat - Op.: > - Value: 1780 - U.M.: mg/kg

Test: LC50 - Route: Inhalation - Species: Rat - Op.: > - Value: 1000 - U.M.: mg/m³ -

Duration: 6 hours - Notes: evaluation of similar products chemically

Test: LC50 - Route: Inhalation - Species: Rat - Op.: < - Value: 5000 - U.M.: mg/m³ -

Duration: 6 hours

Test: LD50 - Route: Skin - Species: Rabbit - Op.: > - Value: 5000 - U.M.: mg/kg

Type: b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rat - Op.: Positive

Type: c) serious eye damage/irritation:

Test: Eye Corrosive - Route: EYES - Op.: Positive

Etidronic acid - CAS: 2809-21-4

Type: a) acute toxicity:

Test: LC50 - Route: Oral - Species: Mouse - Op.: = - Value: 1100 - U.M.: mg/kg

Test: LC50 - Route: Oral - Species: Rat - Op.: = - Value: 3130 - U.M.: mg/kg

Test: LD50 - Route: Skin - Species: Rabbit - Op.: > - Value: 7940 - U.M.: mg/kg

Type: b) skin corrosion/irritation:

Test: Skin Corrosive - Op.: Positive

Type: c) serious eye damage/irritation:

Test: Eye Corrosive - Op.: Positive

Sodium nitrite - CAS: 7632-00-0

Type: a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat - Op.: = - Value: 180 - U.M.: mg/kg

Test: LD50 - Route: Inhalation - Species: Rabbit - Op.: = - Value: 5500 - U.M.: mg/kg -

Duration: 4 hours

Test: LD50 - Route: Inhalation - Species: Rat - Op.: = - Value: 5500 - U.M.: mg/kg

Trisodium nitrilotriacetate - CAS: 5064-31-3

Type: a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat - Op.: = - Value: 1740 - U.M.: mg/kg

Test: LCLo - Route: Skin - Species: Rabbit - Op.: = - Value: 2000 - U.M.: mg/kg

Test: LCLo - Route: Inhalation - Species: Rat - Op.: = - Value: 5 - U.M.: mg/l

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;

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- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Based on the information available it is not expected that this product may cause any adverse environmental effect when use instructions and disposal recommendations are followed. Adopt good working practices, so that the product is not released into the environment.

List of substances hazardous to the environment and eco-toxicological information available:

Potassium hydroxide - CAS: 1310-58-3

Type: a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish - Op.: = - Value: 80 - U.M.: mg/l - Duration h: 96 -

Notes: Gambusia affinis

Endpoint: LC50 - Species: Bacteria - Op.: = - Value: 80 - U.M.: mg/l - Duration h: 24

- Notes: Mosquito

Tetrasodium-ethylenediaminetetraacetate - CAS: 64-02-8

Type: a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish - Op.: > - Value: 1000 - U.M.: mg/l - Duration h: 96 -

Notes: Lepomis macrochirus

Endpoint: LC50 - Species: Fish - Op.: > - Value: 100 - U.M.: mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia - Op.: = - Value: 140 - U.M.: mg/l - Duration h: 48 - Notes: Daphnia magna

Endpoint: EC50 - Species: Daphnia - Op.: > - Value: 100 - U.M.: mg/l - Duration h: 48

Endpoint: EC50 - Species: Daphnia - Op.: = - Value: 40.4 - U.M.: mg/l - Duration h: 48 - Notes: Ceriodaphnia dubia

Endpoint: EC50 - Species: Algae - Op.: > - Value: 300 - U.M.: mg/l - Duration h: 72

- Notes: Pseudokirchneriella subcapitata

Endpoint: EC50 - Species: Algae - Op.: > - Value: 100 - U.M.: mg/l - Duration h: 72

Type: b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Fish - Op.: > - Value: 36.9 - U.M.: mg/l - Duration h: 840

Endpoint: NOEC - Species: Daphnia - Op.: > - Value: 25 - U.M.: mg/l - Duration h: 504

Etidronic acid - CAS: 2809-21-4

Type: a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish - Op.: = - Value: 207 - U.M.: mg/l - Duration h: 48 -

Notes: Leuciscus idus

Endpoint: EC50 - Species: Daphnia - Op.: = - Value: 527 - U.M.: mg/l - Duration h: 48 - Notes: Daphnia Magna

Endpoint: LC50 - Species: Fish - Op.: = - Value: 368 - U.M.: mg/l - Duration h: 96 - Notes: Oncorhynchus Mykiss

Endpoint: EC50 - Species: Algae - Op.: = - Value: 7.23 - U.M.: mg/l - Duration h: 14

Endpoint: LC50 - Species: Fish - Op.: = - Value: 368 - U.M.: mg/l - Duration h: 96

Sodium nitrite - CAS: 7632-00-0

Type: a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish - Op.: > - Value: 0.54 - U.M.: mg/l - Duration h: 96 -

Notes: Oncorhynchus mykiss

Endpoint: LC50 - Species: Fish - Op.: < - Value: 26.3 - U.M.: mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss

Endpoint: EC50 - Species: Daphnia - Op.: = - Value: 15.4 - U.M.: mg/l - Duration h: 48 - Notes: Daphnia magna

Endpoint: EC50 - Species: Algae - Op.: > - Value: 100 - U.M.: mg/l - Duration h: 72 - Notes: Scenedesmus subspicatus

Type: b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia - Op.: = - Value: 9.86 - U.M.: mg/l - Duration h: 1920 - Notes: Daphnia

Endpoint: NOEC - Species: Fish - Op.: = - Value: 6.16 - U.M.: mg/l - Duration h:

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744 - Notes: Ictalurus punctatus

Trisodium nitrilotriacetate - CAS: 5064-31-3

Type: a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish - Op.: = - Value: 103 - U.M.: mg/l - Duration h: 96 -

Notes: Pimephales promelas

Endpoint: EC50 - Species: Algae - Op.: > - Value: 3200 - U.M.: mg/l - Duration h: 8

- Notes: Pseudomonas fluorescens

Endpoint: EC50 - Species: Algae - Op.: < - Value: 5600 - U.M.: mg/l - Duration h: 8

- Notes: Pseudomonas fluorescens

12.2. Persistence and degradability

Potassium hydroxide - CAS: 1310-58-3

Biodegradability: Non-readily biodegradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable

Tetrasodium-ethylenediaminetetraacetate - CAS: 64-02-8

Biodegradability: Non-readily biodegradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable

Etidronic acid - CAS: 2809-21-4

Biodegradability: Not persistent and Biodegradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable

Sodium nitrite - CAS: 7632-00-0

Biodegradability: Non-readily biodegradable - Test: Not applicable - Duration: Not applicable - %: Not applicable - Notes: Not applicable

12.3. Bioaccumulative potential

Tetrasodium-ethylenediaminetetraacetate - CAS: 64-02-8

Bioaccumulation: Bioaccumulative - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

Etidronic acid - CAS: 2809-21-4

Bioaccumulation: Not bioaccumulative - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

Sodium nitrite - CAS: 7632-00-0

Bioaccumulation: Not bioaccumulative - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

12.4. Mobility in soil

Sodium nitrite - CAS: 7632-00-0

Mobility in soil: Not mobile - Test: Not applicable Not applicable - Duration: Not applicable - Notes: Not applicable

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

Product and its residue:

Do not dispose in the canals of wastewater, waterways and soil.

The codes indicating the type of waste are considered based on the recommendations and scheduled use of this product. Different codes may be assigned based on the end user's use and the characteristics of the disposal.

Waste code CER/EWC (2000/532/CE), attributable to the product as:

11 01 07 * pickling bases

HP6 - HP8

Any remaining product should be disposed of with the material.

Containers/contaminated packaging

Containers, even completely empty, must not be disposed in the environment. The packagings which can not be cleaned should be disposed of as the material.

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.

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SECTION 14: Transport information



- 14.1 UN number:
- | | |
|-----------------|------|
| ADR-UN Number: | 1814 |
| IATA-UN Number: | 1814 |
| IMDG-UN Number: | 1814 |
- 14.2. UN proper shipping name
- | | |
|---------------------|------------------------------|
| ADR-Shipping Name: | POTASSIUM HYDROXIDE SOLUTION |
| IATA-Shipping Name: | POTASSIUM HYDROXIDE SOLUTION |
| IMDG-Shipping Name: | POTASSIUM HYDROXIDE SOLUTION |
- 14.3. Transport hazard class(es)
- | | |
|-------------------------------------|----|
| ADR-Class: | 8 |
| ADR-Label: | 8 |
| ADR - Hazard identification number: | 80 |
| IATA-Class: | 8 |
| IATA-Label: | 8 |
| IMDG-Class: | 8 |
- 14.4. Packing group
- | | |
|---------------------|----|
| ADR-Packing Group: | II |
| IATA-Packing group: | II |
| IMDG-Packing group: | II |
- 14.5. Environmental hazards
- | | |
|------------------------------|----|
| ADR-Environmental Pollutant: | No |
| IMDG-Marine pollutant: | No |
- 14.6. Special precautions for user
- | | |
|---|-------------------------|
| ADR-Subsidiary risks: | - |
| ADR-S.P.: | - |
| ADR-Transport category (Tunnel restriction code): | (E) |
| IATA-Passenger Aircraft: | 851 |
| IATA-Subsidiary risks: | - |
| IATA-Cargo Aircraft: | 855 |
| IATA-S.P.: | A3 |
| IATA-ERG: | 8L |
| IMDG-EmS: | F-A , S-B |
| IMDG-Subsidiary risks: | - |
| IMDG-Stowage and handling: | Category A |
| IMDG-Segregation: | "Separated from" acids. |
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Non previsto

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)

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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:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Volatile Organic compounds - VOCs = 0.00 %

Volatile Organic compounds - VOCs = 0.00 g/l

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.00

Where applicable, refer to the following regulatory provisions :

Regulation (EC) n°648/2004 (detergents).

15.2. Chemical safety assessment

Not available

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H318 Causes serious eye damage.

H272 May intensify fire; oxidiser.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H301 Toxic if swallowed.

H351 Suspected of causing cancer.

| Hazard class and hazard category | Code | Description |
|----------------------------------|-------------|--|
| Ox. Sol. 3 | 2.14/3 | Oxidising solid, Category 3 |
| Met. Corr. 1 | 2.16/1 | Substance or mixture corrosive to metals, Category 1 |
| Acute Tox. 3 | 3.1/3/Oral | Acute toxicity (oral), Category 3 |
| 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 |
| Eye Dam. 1 | 3.3/1 | Serious eye damage, Category 1 |
| Eye Irrit. 2 | 3.3/2 | Eye irritation, Category 2 |
| Carc. 2 | 3.6/2 | Carcinogenicity, Category 2 |
| Aquatic Acute 1 | 4.1/A1 | Acute aquatic hazard, category 1 |

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

This document was prepared by a competent person who has received appropriate training.

This MSDS cancels and replaces any preceding release.

Safety Data Sheet

TERACLEAN

Where applicable, refer to the following regulatory provisions :

Council Directive 67/548/EEC (Classification, packaging and labelling of dangerous substances) and subsequent amendments; Regulation (EC) n°1272/2008; Regulation (EC) N. 790/2009 (annex VI), Regulation (EC) n. 1907/2006 (REACH).

Commission Directive 1999/45/EC (Classification, packaging and labelling of dangerous preparation) and subsequent amendments; Commission Directive n. 2006/8/CE.

Directive 2012/18/EU (Seveso III)

Directive 2013/10/EU (aerosols) amending Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) n° 1272/2008 on classification, labelling and packaging of substances and mixtures and subsequent amendments.

Regulation (EC) No 1223/2009 on cosmetic products and subsequent amendments.

Regulation (EU) No 126/2013 amending Annex XVII to Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and subsequent amendments. Regulation (EC) N. 304/2003 and subsequent amendments. Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products and subsequent amendments.

Directives 91/156/CEE, 91/689/CEE, 94/62/CE (Disposal of waste) and subsequent amendments.

The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), current edition.

Regulations IATA/ICAO = Dangerous Goods Regulations by air, current edition.

RID = Regulations concerning the International Carriage of Dangerous Goods by Rail, current edition.

IMDG Code = International Maritime Dangerous Goods Code produced by the International Maritime Organization (IMO), current edition.

Main bibliographic sources:

ESIS: European chemical Substances Information System and Environmental hazard classification.

Occupational exposure limit values (Commission Directives 2000/39/EC and 2006/15/CE)

NIOSH - Registry of toxic effects of chemical substances (1983)

Material Safety Data Sheets of chemicals, REACH database

Material Safety Data Sheet and Technical Data of raw material as by Supplier.

Abbreviations and acronyms:

TLV-TWA = Threshold Limit Value- time-weighted average, 8-hour workday, 40-hour workweek; TLV-STEL-15 min = Threshold Limit Values - Short Term Exposure Limit; TLV-C = Ceiling exposure limit; Notes: IBE= Biological Exposure Indices; SEN= sensitizer; Skin= Can be absorbed through the skin. Carcinogenicity categories: A1 / A2 = confirmed / suspected human carcinogen; A3 = Animal carcinogen; A4 / A5 = Not Classifiable/not suspected as a human carcinogen. ACGIH = American Conference on Governmental Industrial Hygienists. OEL =Occupational Exposure Limit. VLPE = Occupational Exposure Limit Values. LTE =long term exposure, STE=short term exposure.

n.av.= Not Available, n.a. = not applicable; LD50=lethal dose (solids and liquids), LC50=lethal concentration (gases) that will kill 50% of the test animals; ADR= European Agreement concerning the International Carriage of Dangerous Goods by Road. Regulations IATA/ICAO = Dangerous Goods Regulations by air, current edition.

RID = Regulations concerning the International Carriage of Dangerous Goods by Rail, current edition. IMDG Code = International Maritime Dangerous Goods Code produced by the International Maritime Organization (IMO), current edition.

PBT = Persistent, Bioaccumulative and Toxic substances. ; vPvB = very Persistent and very Bioaccumulative substances; CMR = Carcinogenic, mutagenic or reproduction toxic substances.

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.