SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : DECAPANT Product code : 585.

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

Stripper

Professional use

1.3. Details of the supplier of the safety data sheet

Registered company name : ORAPI.

Address : PARC INDUSTRIEL DE LA PLAINE DE L'AIN - 225 ALLEE DES CEDRES.01150.SAINT-VULBAS.FRANCE. Telephone : 33-(0)4-74-40-20-20. Fax : 33-(0)4-74-40-20-21.

fds@orapi.com

1.4. Emergency telephone number : 33-(0)1-45-42-59-59.

Association/Organisation : INRS .

Other emergency numbers

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable liquid, Category 2 (Flam. Liq. 2, H225).

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Highly flammable (F, R 11).

Eye irritation (Xi, R 36).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Detergent mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



| • | |
|------------------------------------|--|
| GHS05 | GHS02 |
| Signal Word : | |
| DANGER | |
| Product identifies EC 205-483-3 | rs : 2-AMINOETHANOL |
| Hazard statement | ts : |
| H225 | Highly flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| Precautionary sta | tements - Prevention : |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P280 | Wear protective gloves/eye protection/face protection. |
| | |

Precautionary statements - Response :

P305 + P351 + P338IF 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/physician.

Precautionary statements - Storage :

Store in a well-ventilated place. Keep cool.

2.3. Other hazards

P403 + P235

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| Composition : | | | | |
|-------------------------------------|--|------------------|------|-----------------------|
| Identification | (EC) 1272/2008 | 67/548/EEC | Note | % |
| CAS: 646-06-0 | GHS07, GHS02 | F | [1] | 50 <= x % < 100 |
| EC: 211-463-5 | Dgr | F;R11 | | |
| REACH: 01-2119490744-29 | Flam. Liq. 2, H225 | | | |
| | Eye Irrit. 2, H319 | | | |
| DIOXOLANE 1,3- | | | | |
| CAS: 109-87-5 | GHS02 | F | [1] | 10 <= x % < 25 |
| EC: 203-714-2 | Dgr | F;R11 | | |
| REACH: 01-2119664781-31 | Flam. Liq. 2, H225 | | | |
| METHYLAL | | | | |
| | CUE07 CUE05 | C | [1] | 25 < -0 < 10 |
| CAS: 141-43-5 EC: 205-483-3 | GHS07, GHS05 | C C-D24 | [1] | 2.5 <= x % < 10 |
| | Dgr | C;R34 | | |
| REACH: 01-2119486455-28 | Acute Tox. 4, H302 | Xn;R20/21/22 | | |
| 2-AMINOETHANOL | Acute Tox. 4, H312 | Xi;R37 R52/53 | | |
| 2-AMINOETHANOL | Skin Corr. 1B, H314 | K32/33 | | |
| | Acute Tox. 4, H332 | | | |
| | STOT SE 3, H335 Aquatic Chronic 3, H412 | | | |
| EC: 926-141-6 | GHS08 | Xn | | $2.5 \le x \% \le 10$ |
| REACH: 01-2119456620-43 | Dgr | Xn;R65 | | 2.5 < - x / 0 < 10 |
| REFICIL: 01 2119450020 45 | Asp. Tox. 1, H304 | R66 | | |
| HYDROCARBONS, C11-C14, N-ALKANES, | EUH:066 | Roo | | |
| ISOALKANES, CYCLICS, < 2% AROMATICS | | | | |
| CAS: 69011-36-5 | GHS07, GHS05 | Xn | | 2.5 <= x % < 10 |
| EC: 931-138-8 | Dgr | Xn;R22 | | |
| REACH: 01-2119976362-32 | Acute Tox. 4, H302 | Xi;R41 | | |
| | Eye Dam. 1, H318 | | | |
| ISOTRIDECANOL, ETHOXYLATED | | | | |

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

In case of respiratory irritation, dizziness, nausea or unconsciousness occurs, seek medical attention. Consult a physician in case of disorder.

In the event of splashes or contact with eyes :

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner. Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital. Not to use solvents or thinners.

Consult a doctor in the event of irritation.

In the event of swallowing :

Do not give the patient anything orally.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive

- foam

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)
- various hydrocarbons
- aldehydes
- nitrogen oxides (NOx)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid any contact with the skin and eyes.

Avoid inhalation of vapours.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Avoid contact with skin, eyes and clothings.

Do not breathe vapours, fumes and fog.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged : always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture at all times.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Keep the container away from heat, bad weather, dampness and freezing.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

| - European Union (200 | 9/161/EU, 2006 | /15/EC, 2000/39 | 9/EC, 98/24/EC) |) | |
|-----------------------|----------------|-----------------|-----------------|-----------|---------|
| CAS | VME-mg/m3: | VME-ppm : | VLE-mg/m3: | VLE-ppm : | Notes : |
| 141-43-5 | 2.5 | 1 | 7.6 | 3 | Peau |
| - Germany - AGW (BA | uA - TRGS 900 | , 21/06/2010) : | | | |
| CAS | VME : | VME : | Excess | Notes | |
| 646-06-0 | 100 ml/m3 | 310 mg/m3 | 2(II) | DFG, H, Y | |

| | 1000 ml/m3 | 3200 mg/m3 | 2(II) | DFG | | |
|--|---|------------------------|--|---|------------|----------|
| 141-43-5 | 2 ml/m3 | 5,1 mg/m3 | 2(I) | DFG, H, Y | | |
| - Belgium (Order of | f 19/05/2009, 2010 |): | | | | |
| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : | |
| 109-87-5 | 1000 ppm | - | - | - | - | |
| 141-43-5 | 3 ppm | 6 ppm | - | - | - | |
| - France (INRS - El | D984 :2008) : | | | | | |
| CAS | VME-ppm : | VME-mg/m3 | : VLE-ppm : | VLE-mg/m3: | Notes : | TMP No |
| 109-87-5 | 1000 | 3100 | - | - | - | 84 |
| 141-43-5 | 1 | 2.5 | 3 | 7.6 | - | 49, 49 B |
| - Spain (Instituto N | acional de Segurida | d e Higiene en | el Trabajo (INS | SHT), Mayo 2010 |): | |
| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : | |
| 109-87-5 | 1000 ppm | - | - | - | - | |
| 141-43-5 | 3 ppm | 6 ppm | - | - | - | |
| - Netherlands / MA | C-waarde (SER, 4 | May 2010) : | | | | |
| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : | |
| 109-87-5 | 1000 ppm | - | - | - | - | |
| 141-43-5 | 1 ppm | 3 ppm | - | - | - | |
| - Poland (2009) : | | | | | | |
| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : | |
| 646-06-0 | 10 mg/m3 | 50 mg/m3 | - | - | - | |
| 109-87-5 | 1000 mg/m3 | 3500 mg/m3 | - | - | - | |
| 141-43-5 | 3 mg/m3 | 10 mg/m3 | - | - | - | |
| Czech Republic (Re | egulation No. 361/2 | 2007): | | | | |
| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : | |
| 141-43-5 | 5 mg/m3 | 10 mg/m3 | - | - | - | |
| - UK / WEL (Work | - | - | 2007): | | | |
| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : | |
| | 1000 ppm | 1250 ppm | - | - | - | |
| 109-87-5 | | | | | | |
| 109-87-5 141-43-5 | | | - | - | - | |
| 141-43-5 | 3 ppm | 6 ppm | - ffact lavel (DN | - //FI)• | - | |
| 141-43-5 Derived no effect lev | 3 ppm rel (DNEL) or deri | 6 ppm ved minimum e | - ffect level (DN | - /IEL): | - | |
| 141-43-5 Derived no effect lev | 3 ppm | 6 ppm ved minimum e | - ffect level (DN Workers. | - /IEL): | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met | 3 ppm vel (DNEL) or deri ANOL (CAS: 141-4 thod: | 6 ppm ved minimum e | | | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal | 3 ppm vel (DNEL) or deri ANOL (CAS: 141-4 thod: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy | ct. stemic effects. | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met | 3 ppm vel (DNEL) or deri ANOL (CAS: 141-4 thod: | 6 ppm ved minimum e | Workers. Dermal conta | ct. stemic effects. | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: Ith effects: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body | ct. stemic effects. | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. | ct. stemic effects. v weight/day | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. | ct. stemic effects. v weight/day stemic effects. | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sub | ct. stemic effects. weight/day stemic effects. sstance/m3 | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: th effects: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sub Consumer | ct. stemic effects. weight/day stemic effects. sstance/m3 | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: Exposure met | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: th effects: thod: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sub Consumer us damage to | ct. stemic effects. v weight/day stemic effects. ostance/m3 s. eyes. | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: th effects: thod: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sub Consumer us damage to Long term sy | ct. stemic effects. weight/day stemic effects. sstance/m3 | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: Exposure met Potential heal DNEL : | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: hth effects: thod: the effects: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sub Consumer us damage to Long term sy 3.75 mg/kg b | ct. stemic effects. v weight/day stemic effects. ostance/m3 s. eyes. stemic effects. ody weight/day | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: Exposure met Potential heal DNEL : | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: thod: th effects: thod: thod: th effects: thod: tho | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sut Consumer us damage to Long term sy 3.75 mg/kg b Dermal conta | ct. stemic effects. v weight/day stemic effects. ostance/m3 rs. eyes. stemic effects. ody weight/day ct. | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: Exposure met Potential heal DNEL : | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: thod: th effects: thod: thod: th effects: thod: tho | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sut Consumer us damage to Long term sy 3.75 mg/kg b Dermal conta Long term sy | ct. stemic effects. v weight/day stemic effects. ostance/m3 s. eyes. stemic effects. ody weight/day | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: th effects: thod: th effects: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sut Consumer us damage to Long term sy 3.75 mg/kg b Dermal conta Long term sy 0.24 mg/kg b | ct. stemic effects. v weight/day stemic effects. ostance/m3 rs. eyes. stemic effects. ody weight/day ct. stemic effects. | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: th effects: thod: th effects: thod: th effects: thod: th effects: thod: th effects: thod: th effects: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sub Consumer us damage to Long term sy 3.75 mg/kg b Dermal conta Long term sy 0.24 mg/kg b Inhalation. | ct. stemic effects. v weight/day stemic effects. ostance/m3 s. eyes. stemic effects. ody weight/day ct. stemic effects. ody weight/day | - | |
| 141-43-5 Derived no effect lev 2-AMINOETHA Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : Final use: Exposure met Potential heal DNEL : Exposure met Potential heal DNEL : | 3 ppm rel (DNEL) or deri ANOL (CAS: 141-4 thod: th effects: thod: th effects: thod: th effects: thod: th effects: thod: th effects: thod: th effects: thod: th effects: | 6 ppm ved minimum e | Workers. Dermal conta Long term sy 1 mg/kg body Inhalation. Long term sy 3.3 mg of sub Consumer us damage to Long term sy 3.75 mg/kg b Dermal conta Long term sy 0.24 mg/kg b Inhalation. | ct. stemic effects. v weight/day stemic effects. ostance/m3 s. eyes. stemic effects. ody weight/day ct. stemic effects. ody weight/day stemic effects. | - | |

| Final use: Exposure method: | Workers. Dermal contact. |
|---|--|
| Potential health effects: DNEL : | Long term systemic effects. 17.9 mg/kg body weight/day |
| Exposure method: Potential health effects: DNEL : | Inhalation. Long term systemic effects. 126.6 mg of substance/m3 |
| Predicted no effect concentration (PNEC): | |
| 2-AMINOETHANOL (CAS: 141-43-5) | 6 H |
| Environmental compartment: PNEC : | Soil. 0.035 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 0.085 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 0.0085 mg/l |
| Environmental compartment: | Intermittent waste water. |
| PNEC : | 0.025 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 0.425 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 0.0425 mg/kg |
| METHYLAL (CAS: 109-87-5) | |
| Environmental compartment: | Soil. |
| PNEC : | 4.6538 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 14.577 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 1.4577 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 13.135 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 1.3135 mg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 10 g/l |
| | |

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- PVA (Polyvinyl alcohol)
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

In the event of insufficient ventilation, wear a respiratory apparatus of protection.

Respiratory protection in the presence of aerosol or of fog of product.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| General information : | |
|--|--------------------|
| Physical state : | Viscous liquid. |
| Important health, safety and environmental information | |
| pH : | Not relevant. |
| Boiling point/boiling range : | > 35°C |
| Flash Point Interval : | $PE < 23^{\circ}C$ |
| Vapour pressure (50°C) : | Not relevant. |
| Density : | 0.99 |
| Water solubility : | Soluble. |
| Melting point/melting range : | Not specified. |
| Self-ignition temperature : | Not specified. |
| Decomposition point/decomposition range : | Not specified. |
| 9.2. Other information | |

Flash point $< 0^{\circ}C$

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- accumulation of electrostatic charges.

- heating
- heat
- flames and hot surfaces
- exposure to light
- sources of ignition

10.5. Incompatible materials

- Keep away from :
- acids
- oxidising agents

- bases

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)
- various hydrocarbons
- aldehyde
- nitrogen oxides (NOx)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

11.1.1. Substances

Acute toxicity :

| HYDROCARBONS, C11-C14, N-ALKANES, I Oral route : | SOALKANES, CYCLICS, < 2% AROMATICS LD50 > 5000 mg/kg |
|---|--|
| Dermal route : | LD50 > 5000 mg/kg |
| 2-AMINOETHANOL (CAS: 141-43-5) | |
| Oral route : | LD50 = 1089 mg/kg |
| | Species : Rat |
| | OECD Guideline 401 (Acute Oral Toxicity) |
| Inhalation route : | LC50 %@IDC_LA_INHAL_QUANTIFIERS 1.3 %@IDC_LA_INHAL_UNITS |
| in corrosion/skin irritation : | |

Skin corrosion/skin irritation :

2-AMINOETHANOL (CAS: 141-43-5) Corrosivity :

Causes severe skin burns. Species : Rabbit OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

| Serious damage to eyes/eye irritation : 2-AMINOETHANOL (CAS: 141-43-5) | Species : Rabbit |
|---|---|
| DIOXOLANE 1,3- (CAS: 646-06-0) Causes serious eye irritation. | |
| Corneal haze : | 1 <= Average score < 2 and effects totally reversible within 21 days of observation |
| Respiratory or skin sensitisation : 2-AMINOETHANOL (CAS: 141-43-5) Guinea Pig Maximisation Test (GMPT) : | Non-sensitiser. Species : Others OECD Guideline 406 (Skin Sensitisation) |
| 11.1.2. Mixture | |
| No toxicological data available for the mixture. | |
| ECTION 12 : ECOLOGICAL INFORMATION | |
| 12.1. Toxicity | |
| 12.1.1. Substances 2-AMINOETHANOL (CAS: 141-43-5) Fish toxicity : | LC50 = 170 mg/l Species : Carassius auratus Duration of exposure : 96 h Other guideline |
| | NOEC = 1.2 mg/l Species : Oryzias latipes Duration of exposure : 28 days |
| Crustacean toxicity : | EC50 = 65 mg/l Species : Daphnia magna Duration of exposure : 48 h Other guideline |
| | NOEC = 0.85 mg/l Species : Daphnia magna Duration of exposure : 21 days OECD Guideline 211 (Daphnia magna Reproduction Test) |
| Algae toxicity : | ECr50 = 2.5 mg/l Species : Scenedesmus capricornutum Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Aquatic plant toxicity : | Duration of exposure : 72 h |
| 12.1.2. Mixtures | |
| No aquatic toxicity data available for the mixture. | |
| 12.2. Persistence and degradability | |
| 12.2.1. Substances | |
| 2-AMINOETHANOL (CAS: 141-43-5) Five-day biochemical oxygen demand : | DBO5 = 0.8 g/g |
| Biodegradability : | Rapidly degradable. |

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

14.1. UN number

1993

14.2. UN proper shipping name

UN1993=FLAMMABLE LIQUID, N.O.S.

(dioxolane 1,3-, methylal)

14.3. Transport hazard class(es)

- Classification :



14.4. Packing group

Π

14.5. Environmental hazards

14.6. Special precautions for user

| ADR/RID | Class | Code | Pack gr. | Label | Ident. | LQ | Provis. | EQ | Cat. | Tunnel |
|---------|-------|---------|----------|----------|----------|---------|--------------|------|------|--------|
| | 3 | F1 | II | 3 | 33 | 1 L | 274 601 640C | E2 | 2 | D/E |
| | | | | | | _ | | _ | | |
| IMDG | Class | 2°Label | Pack gr. | LQ | EMS | Provis. | EQ | | | |
| | 3 | - | II | 1 L | F-E,S-E | 274 | E2 | | | |
| | | | | | | | | | | |
| IATA | Class | 2°Label | Pack gr. | Passager | Passager | Cargo | Cargo | note | EQ | |
| | 3 | - | II | 353 | 5 L | 364 | 60 L | A3 | E2 | |
| | 3 | - | II | Y341 | 1 L | - | - | A3 | E2 |] |

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- Directive 67/548/EEC and its adaptations
- Directive 1999/45/EC and its adaptations
- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

- Labelling for detergents (EC Regulation No. 648/2004,907/2006) :

- less than 5 % : anionic surfactants
- less than 5 % : nonionic surfactants
- less than 5 % : aliphatic hydrocarbons

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

| H225 | Highly flammable liquid and vapour. |
|------------|---|
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| R 11 | Highly flammable. |
| R 20/21/22 | Harmful by inhalation, in contact with skin and if swallowed. |
| R 22 | Harmful if swallowed. |
| R 34 | Causes burns. |
| R 37 | Irritating to respiratory system. |
| R 41 | Risk of serious damage to eyes. |
| R 52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R 65 | Harmful: may cause lung damage if swallowed. |
| R 66 | Repeated exposure may cause skin dryness or cracking. |
| A 1 1 | |

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS02 : Flame

GHS05 : Corrosion