SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1. Product identifier:

Chemical decontaminant SAFUREX®

1.2. Relevant identified uses of the substance or mixture and not advised uses:

1.2.1. Relevant identified uses of the substance or mixture:

Chemical decontamination of materials and equipment soiled with chemical products.

1.2.2. Not advised uses:

The chemical decontaminant SAFUREX® should not be used to treat chemical splashes on living being.
The chemical decontaminant SAFUREX® should not be used on cyanides chemical splashes without a prior approval by PREVOR laboratory.

1.3. Details of the supplier of the safety data sheet:

PREVOR
Moulin de Verville
BP1
95760 VALMONDOIS
FRANCE
Telephone: +33(0)1 30 34 76 76
Fax: +33(0)1 30 34 76 70
fds@prevor.com
www.prevor.com

1.4. Emergency telephone number:

+33(0)1 30 34 76 76 (business hours, GMT+1).

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

Physical hazards: non-classified.
Health hazards: non-classified.
Environmental Hazards: non-classified.

2.2. Label elements:

No labelling.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures:

No hazardous component at the concentration in the mixture.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures:

4.1.1. Inhalation:

This is not the major route of exposure. In case of adverse effects, consult a doctor.

4.1.2. Eye contact:

In case of ocular exposure, use a washing solution from PREVOR product range like AFTERWASH II® solution or the WASHING SOLUTION, or if not available, physiological serum or any sterile ocular solution.

4.1.3. Skin contact:

No specific hazards. For comfort, the skin can be rinsed with tap water

4.1.4. Ingestion:

This is not the major route of exposure. Non-toxic product by oral exposure. In case of adverse effects, consult a doctor.

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

No known unwanted effects.

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

No specific care.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media:

This product is non-flammable and non-combustible.

5.2. Special hazards arising from the substance or mixture:

No hazards.

5.3. Advices for firefighters:

No specific precautions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Wear safety goggles or safety ocular mask is recommended.

6.2. Environmental precautions:

Avoid discharges into the environment (sewers, rivers, soils).

6.3. Methods and material for containment and cleaning up:

Allow liquid recovery system like retention container to avoid dispersion in the environment.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for save handling:

No specific precautions.

7.2. Conditions for safe storage, including any incompatibilities:

Keep well closed in the original packaging. This product has a three years shelf-life if kept sealed in its original packaging.

When possible, store containers in a dry location, and keep away from frost or any source of intense heat (storage temperature between 5 and 50 °C).

The product is stable in normal storage, handling and use conditions.

7.3. Specific end use(s):

Chemical decontamination of materials and equipment soiled with chemical products.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters:

No known exposure limit.

8.2. Exposure control:

8.2.1. Appropriate engineering controls:

No specific precautions.

8.2.2. individual protection measures, such as personal protective equipment:

Eye/face protection:

Safety goggles or ocular mask.

Skin protection:

No specific precautions.

Respiratory protection:

No specific precautions.

Thermal risk:

No specific precautions.

8.2.3. Environmental exposure controls:

None.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

a) Appearance (at 20°C):

Orange liquid.

b) Odour:

Odourless.

c) pH:

pH between 7.2 and 7.7 (at 20 °C).

d) Melting point / freezing point:
Around 0 °C.
e) Initial boiling point and boiling range:
Around 100 °C.
f) Flash point:
Non applicable because the mixture is non-flammable.
g) Evaporation rate:
1 (water = 1).
h) Relative density:
1.129 $g.cm^{-3}$.
i) Solubility (ies):
100 % miscible in water.
Slightly miscible in organic solvents.
j) Decomposition temperature:
Thermal decomposition above 100 °C.
k) Viscosity:
6.03 mPa.s.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity:
No hazardous reaction.
10.2. Chemical stability:
Stable.
10.3. Possibility of hazardous reactions:
None.
10.4. Conditions to avoid:
Do not store at a temperature lower than 5 °C or at a temperature higher than 50 °C.
10.5. Incompatible materials:
None known to date.
10.6. Hazardous decomposition products:
None.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects (all tests for this section are performed on active principle contained in SAFUREX® decontaminant):
a) Acute toxicity:
Non-toxic by oral exposure (LD_{50} > 2000 $mg.kg^{-1}$).
b) Skin corrosion / irritation:
Non-irritant and non-corrosive.
c) Serious eye damage / irritation:
Non-irritant and non-corrosive.
d) Respiratory or skin sensitisation:
Non-sensitising.
e) Germ cell mutagenicity:
Non-mutagenic.
f) Cytotoxicity:
non-cytotoxic (MTT test on fibroblasts).

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity (all tests for this section are performed on active principle contained in SAFUREX® decontaminant):
12.1.1. Microtoxicity:
Not determined.
12.1.2. Aquatic toxicity:
Not determined.
12.2. Persistence and degradability:
Not determined.

12.3. Bioaccumulative potential:

SAFUREX® decontaminant is not bioaccumulable (log Ko/w: 100 % miscible in water).

12.4. Mobility in soil:

Not determined.

12.5. Results of PBT and vPvB assessment:

Not applicable because the chemical safety report is not required.

12.6. Other adverse effects:

None other adverse effect known to date.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

No specific disposal measures for this non-hazardous aqueous solution (possible waste code 07 07 99).
Containers can be recycled after cleaning or considered as packaging waste (waste code 15 01 02).
This aqueous solution can be absorbed with an absorbent from PREVOR products' range like the polyvalent absorbent POLYCAPTOR® or the polyvalent neutralising absorbent TRIVOREX®.
The amalgam of absorbent and SAFUREX® chemical decontaminant can be treated by incineration like absorbents waste contaminated with non-dangerous substances (waste code 15 02 03).
Do not discharge into the environment.
Refer to national or regional waste treatment regulation.

SECTION 14. TRANSPORT INFORMATION

14.1. UN number:

Non applicable.

14.2. UN proper shipping name:

Non applicable.

14.3. Transport hazard class(es):

Non applicable.

14.4. Packing group:

Non applicable.

14.5. Environmental hazards:

No available information to date.

14.6. Special precautions for user:

None.

14.7. Transport in bulk according to Annex II of MARPOL convention 73/78 and the IBC Code:

Non applicable.

SECTION 15. REGULATORY INFORMATION

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

Mixture classified as non-hazardous in accordance with the European Regulations concerning labelling of hazardous mixtures: regulation 1272/2008/EC (CLP). As this mixture is non-hazardous, a MSDS is not legally required as per the Directive 1907/2006 article 31 and per the amendment with Directive 1272/2008 article 57.
The MSDS grid follows the regulation 2015/830/EC (REACH).

15.2. Chemical safety assessment:

Non applicable.

SECTION 16. OTHER INFORMATION

Recommended use:

SAFUREX® decontaminant is a solution for chemical decontamination of materials and equipment soiled with chemicals products. It permits to neutralize splashes and residues of aqueous acid or basic chemical products or chemical products containing fluoride ions.
SAFUREX® decontaminant can also be used to decontaminate protective equipment, material or in addition with TRIVOREX® polyvalent neutralizing absorbent in case of chemical spills in order to facilitate the neutralization.

Recommendation before use:

1- Store SAFUREX® chemical decontaminant close to risk areas.
2- Read operating instructions.
3- Use SAFUREX® chemical decontaminant as quickly as possible.
4- Ventilate the area if necessary.
5- Use appropriate safety equipment adapted to the type of chemical product which contaminated the material or equipment.

Instructions for use:

1- Spray the contaminated surface with SAFUREX® chemical decontaminant.
2- SAFUREX® chemical decontaminant colours in blue in presence of a base and in pink in presence of an acid. When the falling liquid residue colour gets back to yellow, the decontamination is finished.
3- In case of hydrofluoric acid or one of its derivatives, check that the free fluoride rate is lower than 1.5 mg/L with an external control system like fluoride ions' test strips. If it is not, restart to step 1.
4- Clean up decontaminated surface according to your current cleaning protocol or rinse with water.
5- Recover the chemical product washing residues with, for example, an absorbent from PREVOR range products like TRIVOREX® polyvalent neutralising absorbent.
6- Store and reprocess liquid or solid residues with chemical waste and with the same protocol than incriminated chemical product. The amalgam of absorbent, SAFUREX® chemical decontaminant and chemical can be treated by incineration like absorbents waste contaminated with dangerous substances (waste code 15 02 02*).

Caution:

1- SAFUREX® decontaminant is a solution for chemical decontamination of materials and equipment. Do not use for the decontamination of living beings. For human decontamination, it is recommended to use a solution from PREVOR product range. HEXAFLUORINE® solution can be used in case of contact with hydrofluoric acid or its derivatives. DIPHOTERINE® solution is recommended for the other chemical products.
2- The chemical decontaminant SAFUREX® should not be used on cyanides chemical splashes without a prior approval by PREVOR laboratory.
3- If it is impossible to see the yellow colour return (colour blindness, already coloured chemical product, opaque surface…), a pH measurement system like pH paper can be used.
4- The neutralisation reaction between concentrated chemical and SAFUREX® chemical decontaminant can be exothermic. Do not touch the chemical after adding SAFUREX® chemical decontaminant.
5- SAFUREX® chemical decontaminant can strongly react with chemical products which react violently with water.
6- Mixture ready to use, do not mix with other products before use.
7- Chemicals miscible with water can be cleaned by washing mechanical action. Sticky, viscous or non-miscible liquids will not be cleaned with optimal efficiency.
8- Coloured crystals can appear on decontaminated surface if it is not enough rinsed or cleaned after decontamination. If this is the case, a water rinsing (hot water for better efficiency) will allow removing these dry crystals.
9- Do not discharge SAFUREX® decontaminant or decontamination residues into the environment.

Abbreviations:

GMT: Greenwich Mean Time.
LD_{50}: Lethal Dose. Median lethal dose of a substance, or the amount required to kill 50 % of a given test population.
MTT test: test performed with tetrazolium salt reagent (MTT reagent).
CLP: Classification, Labelling and Packaging of substance and mixtures. It constitutes the European implementation of the UN's Globally Harmonized System (GHS).
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals.
EC: European Commission.
SDS: Safety Data Sheet.

This sheet complements the technical sheets but does not replace them. The information that is contained herein is based on the state of our knowledge related to the product concerned at the date of issue and is given in good faith. Moreover, the user's attention is drawn to the possible risks incurred by using the product for any other use than that for which it was intended.