



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

1.1. Product identifier:

TRIVOREX®

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

1.2.1. Relevant identified uses of the substance or mixture:

Absorbent and neutralizer for chemicals.

1.2.2. Uses advised against:

None.

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

environnement.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:

As for all powder and if necessary, blow nose in order to remove any particles from the respiratory tract.

4.1.2. Eye contact:

As for all powder and if necessary, perform a washing with NaCl by PREVOR® solution or otherwise, wash with copious amounts of water, eyes and under eyelids.

4.1.3. Skin contact:

Without particular danger.

4.1.4. Ingestion:

Make spit the absorbent. Rinse thoroughly mouth with water. Do not give anything by mouth. 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 hazard.



5.3. Advice for firefighters:

No specific precautions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Limit contact with eyes by wearing safety glasses mask.

Limit inhaling dust by wearing a dust mask.

6.2. Environmental precautions:

Even if the mixture is not ecotoxic, limit discharges into the environment.

6.3. Methods and material for containment and cleaning up:

Recover the entire product by means of diverse brooms, scrapers and shovels.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

Respect hygiene measures (no eating or drinking) when manipulating product.

Wash hands after use.

Avoid the formation of dust clouds in order to avoid inhalation. Thus, sprinkle TRIVOREX® neutralizing absorbent as near as possible to the spill.

Very low sensitivity to electrostatic sparks (M.I.E. > 1000 mJ).

7.2. Conditions for safe storage, including any incompatibilities:

Keep well closed in the original packaging.

Store shielded from humidity, heat, and sources of ignition.

7.3. Specific end use(s):

Absorbent and neutralizer for chemicals.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters:

Total dust: TWA = 10 mg.m⁻³.

8.2. Exposure control:

8.2.1. Appropriate engineering controls:

Plan adequate ventilation for places where dust is formed.

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

Eye/face protection:

If dust clouds are formed wear safety goggles.

Skin protection:

Hand protection:

For frequent or prolonged manipulation, wear waterproof gloves to limit contact between the skin and the absorbent.

Other:

No additional protection for the skin.

Respiratory protection:

No protection necessary.

In case of prolonged use in a confined atmosphere (no ventilation and no aeration) or in case of dust cloud formation, ventilate the premises or wear a dust mask.

Thermal risk:

No thermal risk with this absorbent alone.

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):**

Powder beige to orange.

b) **Odour:**

None.

c) **pH:**

pH = 7,1 (at 100 g.L⁻¹ and at 20°C).



- d) Melting point / freezing point:
>200°C.
- e) Flammability (solid, gas):
M.I.E. (Minimal Inflammation Energy): >1000 mJ
- f) Relative density:
0.7 g.cm⁻³.
- g) Solubility (ies):
Absorbs water.
- h) Partition coefficient n-octanol/water:
TRIVOREX® neutralizing absorbent does not dissolve in water or in n-octanol.
- i) Decomposition temperature:
Thermal decomposition above 100°C.
- j) Explosive properties:
Very low sensitivity to electrostatic sparks (M.I.E. > 1000 mJ).
- k) Oxidising properties:
No oxidising property.

9.2. Other information:

Granulometry: d(0,5) = 330 µm.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity:

The product swells in presence of liquids.

10.2. Chemical stability:

Stable in the conditions recommended for storage.

10.3. Possibility of hazardous reactions:

- Can emit gaseous chloramines in potential contact with concentrated bleach (≥ 9.6%) or chlorinated oxidisers throughout neutralization. Wear safety equipment appropriate for chlorinated chemicals.
- Can cause emission of gaseous HCN in the case of use on alkaline cyanide salts. Wear safety equipment appropriate for cyanided gas or request previous expertise to PREVOR laboratory.

10.4. Conditions to avoid:

None known to date.

10.5. Incompatible materials:

None known to date.

10.6. Hazardous decomposition products:

Thermal decomposition above 100°C with liberation of carbon monoxide and dioxide, nitrogen oxides, organic vapours.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

- a) Acute toxicity:
Mixture of non-toxic products.
- b) Skin corrosion / irritation:
Mixture of non-irritant and non-corrosive products.
- c) Serious eye damage / irritation:
Mixture of non-irritant and non-corrosive products.
- d) Respiratory or skin sensitisation:
Mixture of non sensitisable products.
- e) Germ cell mutagenicity:
Mixture of non-mutagenic products.
- f) Carcinogenicity:
Mixture of non-carcinogen products.
- g) Reproductive toxicity:
Mixture of non-reprotoxic products.
- h) STOT – single exposure:
Mixture of non-toxic products.
- i) STOT – repeated exposure:
Mixture of non-toxic products.



j) Aspiration hazard:

Mixture of non-toxic products.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity:

TRIVOREX® neutralizer absorbent is a mixture of non-ecotoxic products.

12.2. Persistence and degradability:

Mixture of non-persistent and non-degradable products.

12.3. Bioaccumulative potential:

Mixture of non-bioaccumulative products.

12.4. Mobility in soil:

Mixture of products having no mobility in soil.

12.5. Results of PBT and vPvB assessment:

Non applicable because the report on the chemical safety is not required.

12.6. Other adverse effects:

No other adverse effects known to date.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

- Reuse or recycle the container.
- Evacuate the absorbent powder as a non-dangerous waste according to the current regulation. In European Union, use the waste code 15 02 03.

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:

TRIVOREX® neutralizer absorbent presents no danger for the environment.

14.6. Special precautions for user:

None.

14.7. Transport in bulk according to Annex II of MARPOL 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 regulation concerning labelling of hazardous mixtures: regulations 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:

Neutralizer and absorbent for chemicals.



Instructions for use:

1. Prerequisite recommendations:
 - a. Ventilate area and isolate the dangerous area.
 - b. Use appropriate safety equipment (boots, safety glasses, gloves...).
 - c. Have near the appropriate first aids equipment (eyewash, autonomous portable shower of DIPHOTERINE[®], PREVIN[®] or HEXAFLUORINE[®] solution; sprays of DIPHOTERINE[®] or PREVIN[®] solution).
 - d. Use **TRIVOREX[®]** neutralizing absorbent as quickly as possible.
2. Sprinkle **TRIVOREX[®]** neutralizing absorbent around the spill.
3. Recover the liquid with **TRIVOREX[®]** neutralizing absorbent.
4. Allow 5 minutes. The absorbent turns pink in contact with an acid and turn bleu in contact with a base. In case of contact with an acid the neutralization causes an effervescence composed of only CO₂. In case of prolonged use (over 15 minutes) and enclosed spaces (without ventilation or aeration), carry a direct reading device for CO₂.
The mixture becomes yellow when the acid or basic chemical is neutralized.
5. Specific case on very concentrated chemicals: if the final residue stays bleu or pink, so the spilled chemical is very concentrated. To neutralize it completely, spray the SAFUREX[®] chemical decontaminant on the mixture comprised, then add **TRIVOREX[®]** neutralizer absorbent. Alternate these two operations until obtain a yellow mixture.
In use of concentrated acids or concentrated bases, an exothermic reaction (<100 °C) is possible. Avoid contact with the amalgam during the absorption / neutralization reaction.
6. Collect, store, and restate the solidified residue according to current regulation (see section below waste treatment).

Protocol for products reacting with water (ex: POCl₃, PCI₃...):

To neutralize these chemicals:

1. Wear safety equipment appropriate to acid chemicals and specially a chemical vapour mask.
2. Absorb the spilled liquid with **TRIVOREX[®]** neutralizing absorbent. The waste generated will be solidified but kept reactive.
3. Then add slowly the SAFUREX[®] chemical decontaminant on the mixture generated. This will trigger the chemical neutralization and can cause an acid vapour release. Thus, the acid generated will be neutralized by the **TRIVOREX[®]** neutralizing absorbent.
4. Alternate the add of **TRIVOREX[®]** neutralizing absorbent and SAFUREX[®] chemical decontaminant until obtain a yellow mixture.

Caution:

- In case of use on concentrated bleach or chlorinated oxidizer (sodium hypochlorite ≥ 9.6%), the neutralizing reaction can quickly cause an exothermic reaction with chloramines gaseous release. These chemicals are like these found in the swimming pool after a chlorine treatment. To hedge against the hazard, wear a protective face mask anti chlorine and well ventilate the area. This reaction does not appear with diluted bleach.
- Like all absorbents, **TRIVOREX[®]** neutralizing absorbent has no effect on chemical toxicity: the final residue is no more acid or basic corrosive but can keep its toxicity (ex: HF, HCN).
- In case of slightly moisture catch **TRIVOREX[®]** neutralizing absorbent can be solidified and slightly brown, its efficient is not significantly reduced.
- The **TRIVOREX[®]** neutralizing absorbent use on alkaline cyanide salts can generate a slightly emission of gaseous hydrogen cyanide HCN. These alkaline cyanide salts are rare chemicals but with a significant hazardousness. It is possible to use **TRIVOREX[®]** neutralizing absorbent on these chemicals by wearing an anti-gas mask appropriate for cyanides. In lack of control or in case of doubt, we advise to request previous expertise to PREVOR laboratory.



Waste treatment made up of chemical and TRIVOREX® neutralizing absorbent:

- Collect, store, and restate the residue of absorption with the entire caution requisite for the handling of chemical spilled.
- Do not discharge the residue to the environment and evacuate it with chemical wastes.
- In European Union:
 - If the neutralized chemical is on the declassified waste list (available on the website environnement.prevor.com), then the generated waste is non-hazardous and can be evacuate with the waste code 15 02 03.
 - If this is not the case, the waste must be evacuated like a hazardous waste by using the waste code 15 02 02*.
- The **TRIVOREX®** neutralizing absorbent containers can be reused or recycled according to screening current directives.

Abbreviations:

MSDS: Material Safety Data Sheet.

CLP: Classification, Labelling and Packaging of substance and mixtures.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals.

EC: European Commission.

GMT: Greenwich Mean Time.

MIE: Minimal Inflammation Energy.

TWA: Time-Weighted Average exposure limit. It is the acceptable average maximal concentration, for a given substance, in the air of the workplace, where the worker is brought to work for a whole day (8h).

d(0.5): volumetric distribution of fifty percent of the powder. Size below (and above) which fifty percent of the grains are.

HCN: hydrocyanic acid or hydrogen cyanide.

POCl₃: phosphoryl chloride.

PCl₃: phosphorous trichloride.

HF: hydrofluoric acid.

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.