



Safety data sheet

according to Regulation (EC) No. 1907/2006

Printing date 20.09.2011

Version number 1

Revision: 20.09.2011

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

- **Product identifier**
- **Trade name:** TRIS hemisulphate PUFFERAN® ≥ 98%
- **Article number:** 6986
- **CAS Number:**
6992-38-7
- **EC number:**
230-259-7
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Laboratory chemical
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Carl Roth GmbH + Co.KG
Schoemperlenstraße 3-5
76185 Karlsruhe
Telefon: +49/(0)721 5606-0 Telefax: +49/(0)721 5606-149 e-mail: info@carlroth.de
- **Further information obtainable from:** Department Health, Safety and Environment
- **Emergency telephone number:** Poison Centre Munich Telefon +49/(0)89 19240

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008** Void
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- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Void
- **Information concerning particular hazards for human and environment:**
No hazardous product as specified in Directive 67/548/EEC.
- **Classification system:**
This product is not hazardous according to EEC directives 67/548/EEC / 1999/45/EC or regulation (EC) No 1272/2008.
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- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Other hazards** All chemicals are potentially dangerous. They should only be handled by specially trained personnel.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** Substances
- **CAS No. Description**
6992-38-7 [2-Hydroxy-1,1-bis(hydroxymethyl)
ethyl]ammoniumhydrogensulfat
- **Identification number(s)**
- **EC number:** 230-259-7

4 First aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately rinse with water.
If skin irritation continues, consult a doctor.

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- **After eye contact:** Rinse opened eye for 10 minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and drink a glass of water. Do not induce vomiting.
If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Avoid formation of dust.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose of the material collected according to regulations.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Handling corresponding to laboratory safety guidelines.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.

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Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Required when dusts are generated.· **Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:

Solid

Colour:

Whitish

· **Odour:**

Odourless

· **Odour threshold:**

Not determined.

· **pH-value (10 g/l) at 20°C:**

4.5-5.1

· **Change in condition**

Melting point/Melting range:

163-168°C

Boiling point/Boiling range:

Undetermined.

· **Flash point:**

Not applicable.

· **Flammability (solid, gaseous):**

Product is not flammable.

· **Ignition temperature:**

Decomposition temperature:

Not determined.

· **Self-igniting:**

Not determined.

· **Danger of explosion:**

Product does not present an explosion hazard.

· **Explosion limits:**

Lower:

Not determined.

Upper:

Not determined.

· **Vapour pressure:**

Not applicable.

· **Density:**

Not determined.

· **Relative density**

Not determined.

· **Vapour density**

Not applicable.

· **Evaporation rate**

Not applicable.

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- **Solubility in / Miscibility with water at 20°C:** 85.1 g/l
- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** No information available.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Strong oxidizing agents.
- **Hazardous decomposition products:** No information available.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:** Quantitative data on the toxicity of this product are not available.
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **after inhalation:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
The substance is not subject to classification according to the latest version of the EU lists.
- **Further information:**
To the best of our knowledge, the toxicological properties have not been thoroughly investigated. Hazardous properties cannot be excluded.
The product should be handled with the care usual when dealing with chemicals.

12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** Quantitative data on the ecological effect of this product are not available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Do not allow to enter waters, waste water, or soil!
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.
- **Uncleaned packaging:**
- **Recommendation:** Disposal according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **UN-Number**
 - **ADR, ADN, IMDG, IATA** Void
 - **UN proper shipping name**
 - **ADR, ADN, IMDG, IATA** Void
 - **Transport hazard class(es)**
 - **ADR, ADN, IMDG, IATA**
 - **Class** Void
 - **Packing group**
 - **ADR, IMDG, IATA** Void
 - **Environmental hazards:**
 - **Marine pollutant:** No
 - **Special precautions for user** Not applicable.
 - **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
 - **Transport/Additional information:**
-
- **ADR**
 - **Remarks:** Not subject to transport regulations.
 - **UN "Model Regulation":** -

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Not subject to classification.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Department: Health, Safety and Environment
- **Contact:** Herr Dr. Hagel
- **Abbreviations and acronyms:**
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

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· *** Data compared to the previous version altered.**

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