

MATERIAL SAFETY DATA SHEET

PEDOT:PSS PH1000



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

1.1. Product Details

Product Code : M122
Name : Poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate) (PH1000)
REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.
CAS No. : 155090-83-8

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

Identified uses : Laboratory chemicals

1.3. Supplier details

Supplied by : Ossila Limited
Kroto Innovation Centre
Broad Lane, Sheffield
S3 7HQ, UK
Telephone : 0114 213 2770
Email address : info@ossila.com

2. Hazards identification

2.1. Classification of the substance or mixture

Hazard statements according to Regulation (EC) 1272/2008

Not a hazardous substance or mixture

2.2. Label elements

Labelling according Regulation (EC) No 1272/2008

Not a hazardous substance or mixture

2.3. Other hazards

None.

3. Composition/Information on ingredients

3.2. Mixtures

Synonyms : Poly(2,3-dihydrothieno-1,4-dioxin)-poly(styrenesulfonate), PEDOT/PSS

No components need to be disclosed according to the applicable regulations.

4. First aid measures

4.1. Description of first aid measures

If inhaled

Remove to fresh air. If not breathing give artificial respiration. Call a physician.

In case of skin contact

Wash off with plenty of water. Remove contaminated clothing and shoes.

In case of eye contact

Rinse with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers and keeping eye wide open while rinsing. Remove contact lens if present before rinsing. Call a physician.

If swallowed

Wash out mouth with water. Give large volume of water to drink. Do not induce vomiting. Call a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

No data available.

5. Fire fighting

5.1. Extinguishing media

Suitable extinguishing media: Dry chemical, alcohol-resistant foam, carbon dioxide or water spray (not jet). Consult with local fire authorities before attempting large scale firefighting operations.

5.2. Special hazards arising from the substance of mixture

Hazardous combustion products: Carbon oxides, sulfur oxides

5.3. Advice for firefighters

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases and vapours may be generated by thermal decomposition.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Containment and cleaning:

Contain and clean up spill if safe to do so. Soak up with inert absorbent material and dispose of according to local regulations.

7. Handling and storage

7.1. Precautions for safe handling

Avoid inhalation and contact with eyes, skin and clothing. Provide adequate exhaust ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated place inside of a tightly sealed container. Keep containers upright to prevent leakage.

Quality-related information: Recommended storage temperature 5 – 10 °C. Product can not be used if it has been frozen. Reseal containers well that have been opened to prevent evaporation of water and potential formation of a non-redispersible solid.

7.3. Specific end uses

Use in laboratories.

8. Exposure controls / Personal protection

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Biological occupational exposure limits

This product does not contain any hazardous materials with biological limits.

8.2. Exposure controls

Engineering measures

Handle in accordance with good industrial practices for hygiene and safety. Ensure eyewash stations and safety showers are close to the laboratory workstation.

Personal protective equipment

Eyes: Wear safety glasses with side-shields conforming to appropriate government standards such as NOISH (US) or EN166 (EU).

Skin: Handle with appropriate gloves and use proper glove removal technique to avoid skin contact. Dispose of gloves in accordance with applicable laws. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Clothing: Wear appropriate protective clothing to minimise skin contact; the type of clothing should be appropriate for the concentration and amount of dangerous substance used.

General hygiene measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | | |
|------------------------|---|----------------------------|
| Appearance | : | Dark blue/black suspension |
| Odour | : | None reported |
| Odour threshold | : | No data available |
| pH | : | 1.5 – 2.5 at 25 °C |
| Melting/freezing point | : | 0°C |
| Boiling point | : | 100°C |
| Flash point | : | No data available |

| | | |
|--|---|------------------------------|
| Evaporation rate | : | No data available |
| Flammability | : | No data available |
| Explosive limits | : | No data available |
| Vapour pressure | : | No data available |
| Vapour density | : | No data available |
| Relative density | : | 1 g/cm ³ at 20 °C |
| Solubility(ies) | : | No data available |
| Partition coefficient: <i>n</i> -octanol/water | : | No data available |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | : | No data available |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |

9.2. Other safety information

No data available.

10. Stability and reactivity

10.1 Reactivity

No data available.

10.2. Chemical stability

Stable under normal temperatures and pressures under recommended storage conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

Not determined. Hazardous polymerisation not expected.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/eye irritation

May cause eye irritation.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

Specific target organ toxicity - single exposure

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No data available.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

Routes of exposure

Eye contact, ingestion, inhalation, skin contact.

Signs and Symptoms of Exposure

No data available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

12.1. Toxicity

No data available.

12.2. Persistence and degradability

Readily biodegradable. Persistence is unlikely based on available information.

12.3. Bioaccumulative potential

Bioaccumulation is unlikely.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted, but substance is not considered (very) persistent, (very) bioaccumulative and toxic (PBT/vPvB).

12.6. Other adverse effects

No data available.

13. Disposal

13.1. Waste treatment methods

Product

Observe all federal, state, and local environmental regulations and in accordance with European Directives on waste and hazardous waste. Offer surplus material to a licensed professional waste disposal professional.

Contaminated packaging

Dispose of as unused product.

14. Transport

Non-hazardous for road, air and sea transport.

IATA: Not regulated as a hazardous material.

IMO: Not regulated as a hazardous material.

RID/ADR: Not regulated as a hazardous material.

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available.

15.2 Chemical safety assessment

No chemical safety report/assessment was carried out for this product.

16. Other information

Warranty

This material is for research and development use only. The information provided here is based upon the available information from material suppliers but not warranted as complete and is provided only as a guide. Ossila Limited shall not be held responsible for any damage resulting from use or handling of this product.