

MATERIAL SAFETY DATA SHEET

Hellmanex™ III



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

1.1. Product Details

Product Code : C141
Name : Hellmanex™ III
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. : 7778-53-2

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

2.2. Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]



| | |
|-----------------------------------|--|
| Signal word | Warning |
| Hazard statement(s) | |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| Precautionary statement(s) | |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Supplemental information | None. |

2.3. Other hazards

None.

3. Composition/Information on ingredients

3.2. Mixtures

Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component | CAS # | Weight % | CLP Classification |
|-----------------------------|-----------|----------|---|
| Tripotassium orthophosphate | 7778-53-2 | 15 - 30 | Skin Irrit. 2 (H315); Eye Irrit. 2 (H319); STIT SE 3 (H335) |

Regulation (EC) No. 648/2004: Labelling for contents

Phosphates 15 - < 30 %

Anionic surfactants < 5 %

Non-ionic surfactants < 5 %

4. First aid measures

4.1. Description of first aid measures

After Inhalation

If inhaled, remove to fresh air. In case of respiratory tract irritation, call a physician. If not breathing give artificial respiration.

After skin contact

In case of skin contact, flush with copious amounts of water. In case of skin irritation, consult a physician.

After eye contact

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

After Ingestion

If swallowed, rinse out mouth immediately with water and drink plenty of water. Call a physician immediately.

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

Irritating to eyes, respiratory system and skin.

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

No data available.

5. Fire fighting

5.1. Extinguishing media

The product itself does not burn.

Suitable extinguishing media: Dry chemical, alcohol-resistant foam, carbon dioxide or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.

5.2. Special hazards arising from the substance of mixture

Hazardous combustion products: Carbon oxides, nitrogen oxides, phosphorus oxides, potassium oxides, sodium oxides.

5.3. Advice for firefighters

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 (section 8). Avoid dust formation. Ensure room is well ventilated. Remove all sources of ignition.

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 using an electrically protected vacuum cleaner or by wet-brushing. Dispose of dry waste in closed container for proper disposal according to local regulations.

7. Handling and storage

7.1. Precautions for safe handling

Avoid formation of mist or vapour. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated place inside of a tightly sealed container. Reseal containers that have been opened and keep upright to prevent leakage. Do not store together with acids or oxidising agents.

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 engineering/laboratory practices for hygiene and safety. Ensure eyewash stations and safety showers are close to the laboratory workstation. Ensure good general ventilation is present when handling the product.

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: Light protective clothing.

Respirators: If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protection apparatus: Filtering device with filter or ventilator filtering device of type: A.

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 | : | Clear, colourless to pale yellow liquid |
| Odour | : | Characteristic |
| Odour threshold | : | No data available |
| pH | : | ca. 12 at 20 °C and 10 g/l |
| Melting/freezing point | : | No data available |
| Boiling point/range | : | No data available |
| Flash point | : | No data available |
| Evaporation rate | : | No data available |
| Flammability | : | Not applicable |
| Explosive limits | : | No data available |
| Vapour pressure | : | No data available |
| Vapour density | : | No data available |
| Relative density | : | 1.4 g/cm ³ at 20 °C |
| Solubility(ies) | : | 100 g/l in water at 20 °C |
| Partition coefficient: <i>n</i> -octanol/water | : | No data available |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | 230 °C |
| Viscosity | : | No data available |
| Explosive properties | : | Not applicable |
| Oxidising properties | : | Not applicable |

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

Exothermic reaction with acids and oxidising agents.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Acids and strong oxidising agents.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/eye irritation

No data available.

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

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

Skin contact may result in inflammation. Eye contact may result in redness, tearing and pain. Inhalation may result in coughing, nasal discharge and nose and throat pain.

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

Biodegradability according to OECD

Degradation rate : > 80 %

Regulation on Detergents (EC) No 648/2004

The surfactant(s) contained in this preparation comply(ies) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3. Bioaccumulative potential

No data available.

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.

12.6. Other adverse effects

No data available.

13. Disposal

13.1. Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations and 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, the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

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.