

Safety Data Sheet

Issuing date No data available

Revision Date 15-Feb-2020

Version 4

1. PRODUCT AND COMPANY IDENTIFICATION

Product name Recombinant Human htrA4 protein (His tag)

Recommended use For research use only

Supplier Address Abcam Inc
1 Kendall Square, Ste 341
Cambridge, MA 02139-1517
USA
Tel: (617)225-2272 or 888-77-ABCAM (22226) (US toll free)
Fax: (866) 739-9884 or (866) 457-9616 (both US toll free)

E-mail address technical@abcam.com

Emergency telephone +1 866 928 0789 (Toll free) /+1 202 464 2554

2. HAZARDS IDENTIFICATION

GHS - Classification

| | |
|-----------------------------------|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2 |
| Reproductive toxicity | Category 1B |

GHS Label elements, including precautionary statements



Signal Word
Danger

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H360D - May damage the unborn child

Precautionary Statements - EU (§28, 1272/2008)

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/ eye protection/ face protection

P332 + P313 - If skin irritation occurs: Get medical advice/ attention

P362 - Take off contaminated clothing and wash before reuse

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

Other information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|--|-----------|----------|--|
| Glycerol | 56-81-5 | 15-40 | - |
| Imidazole | 288-32-4 | 1-5 | Skin Corr. 1B (H314) Repr. 1B (H360D) Acute Tox. 4 (H302) |
| Sodium phosphate | 7601-54-9 | 0.1-1 | STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) |
| (2S,3S)-1,4-bis(sulfanyl)butane-2,3-diol | 3483-12-3 | <0.1 | STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) |
| PMSF | 329-98-6 | <0.1 | Skin Corr. 1B (H314) Acute Tox. 3 (H301) |

For the full text of the H-Statements mentioned in this Section, see Section 16

4. FIRST AID MEASURES

| | |
|---------------------------|---|
| General advice | If symptoms persist, call a physician. |
| Eye contact | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. |
| Inhalation | Move to fresh air. If symptoms persist, call a physician. |
| Ingestion | Rinse mouth. If symptoms persist, call a physician. |
| Notes to physician | Treat symptomatically. |

5. FIRE-FIGHTING MEASURES

| | |
|--|--|
| Flammable properties | Not flammable. |
| Flash point | not determined |
| Suitable extinguishing media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Explosion Data | |
| Sensitivity to Mechanical Impact | None. |
| Sensitivity to Static Discharge | None. |
| Protective equipment and precautions for firefighters | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes. |

6. ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------|--|
| Personal precautions | Ensure adequate ventilation. |
| Environmental precautions | Try to prevent the material from entering drains or water courses. |
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |

7. HANDLING AND STORAGE

| | |
|--|--|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. |
| Technical measures/Storage conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------|--------------------------------|---|------------|
| Glycerol 56-81-5 | TWA: 10 mg/m ³ mist | TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction | |

Engineering measures
 Showers
 Eyewash stations
 Ventilation systems

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Long sleeved clothing. Protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|----------------------------------|---------------------------|------------------------------------|---------------------------|
| Appearance | No information available. | Odor | No information available. |
| Odor Threshold | No information available | Physical State @20°C | Liquid |
| pH | 7.00 | Autoignition temperature | No information available |
| Flash point | No information available | Boiling point/boiling range | No information available |
| Decomposition temperature | No information available | Flammability Limits in Air | No information available |
| Melting point/range | No information available | solubility | No information available. |
| Explosion limits | No information available | Vapor Pressure @20°C (kPa) | No information available |
| Specific Gravity | No data available | VOC Content(%) | 25 |
| Evaporation rate | No information available | | |
| Vapor density | No data available | | |

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible products None known based on information supplied.

Conditions to avoid None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

Hazardous polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

| | |
|----------------------------|--|
| Product Information | Irritating to skin, eyes and / or respiratory tract. |
| Inhalation | May cause irritation of respiratory tract |
| Eye contact | May cause irritation |
| Skin contact | May cause irritation |
| Ingestion | Ingestion may cause irritation to mucous membranes |

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|--------------------|------------------------|-----------------|
| Glycerol | Rat - 12,600 mg/kg | Rabbit - >10,000 mg/kg | |
| Imidazole | 220 mg/kg (Rat) | | |

Chronic toxicity

| | |
|-------------------------------|--|
| Reproductive toxicity | Product is or contains a chemical which is a known or suspected reproductive hazard |
| Developmental Toxicity | Contains ingredients that have suspected developmental hazards Possible risk of harm to the unborn child May cause birth defects |
| Target Organ Effects | Skin. Respiratory system. Eyes. |

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|---------------|-------------------|--|----------------------------|---|
| Glycerol | | 51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static | | 500: 24 h Daphnia magna mg/L EC50 |
| Chemical Name | | log Pow | | |
| Glycerol | | 0 | | |
| Imidazole | | -0.02 | | |

13. DISPOSAL CONSIDERATIONS

| | |
|-------------------------------|---|
| Waste disposal methods | This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements. |
| Contaminated packaging | Do not re-use empty containers. |

14. TRANSPORT INFORMATION

| | |
|------------|---------------------|
| DOT | Not dangerous goods |
|------------|---------------------|

IATA Not dangerous goods

ADR Not dangerous goods

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

| | |
|--|-----|
| Acute Health Hazard | yes |
| Chronic Health Hazard | no |
| Fire Hazard | no |
| Sudden Release of Pressure Hazard | no |
| Reactive Hazard | no |

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sodium phosphate | 5000 lb | | | X |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|------------------|--------------------------|------------------------------------|---|
| Sodium phosphate | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|------------------|---------------|------------|--------------|----------|--------------|
| Glycerol | X | X | X | | X |
| Sodium phosphate | X | X | X | | |

International Regulations

| Chemical Name | Carcinogen Status | Exposure limits |
|---------------|-------------------|----------------------------------|
| Glycerol | | Mexico: TWA 10 mg/m ³ |

WHMIS Note:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION**Full text of H-Statements referred to under sections 2 and 3**

H314 - Causes severe skin burns and eye damage H360D - May damage the unborn child H302 - Harmful if swallowed H335 - May cause respiratory irritation H315 - Causes skin irritation H319 - Causes serious eye irritation H301 - Toxic if swallowed

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H360D - May damage the unborn child

Revision Date 15-Feb-2020

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of MSDS