

# Safety Data Sheet

acc. to OSHA HCS

Printing date 01/04/2018

Reviewed on 01/04/2018

## 1 Identification

- **Product identifier**
- **Trade name:** Neutral Protease NB  
from Clostridium histolyticum
- **Article number:** S3030111, S3030112, S3030115
- **CAS Number:**  
9001-92-7
- **EC number:**  
232-642-4
- **Index number:**  
647-014-00-9
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Nordmark Arzneimittel GmbH & Co. KG  
Pinnauallee 4  
D-25436 Uetersen  
Tel.: +49 4122 712-0  
FAX.: +49 4122 712-220  
sicherheitsdatenblatt@nordmark-pharma.de
- **Information department:** Product Safety department Tel.: +49 4122 712 242
- **Emergency telephone number:**  
Medical Emergency Information in case of poisoning:  
Poison Information Center Göttingen - Phone: +49 (0) 551 19240  
(advisory service in German or English language)



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**
- **GHS label elements**  
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS07, GHS08
- **Signal word** Danger
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause respiratory irritation.
- **Precautionary statements**  
Avoid breathing dust/fume/gas/mist/vapors/spray

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 01/04/2018

Reviewed on 01/04/2018

**Trade name: Neutral Protease NB**  
**from Clostridium histolyticum**

(Contd. of page 1)

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves / eye protection / face protection.

[In case of inadequate ventilation] wear respiratory protection.

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER/doctor if you feel unwell.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = \*1

Fire = 0

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** PBT - assessment not available.

· **vPvB:** vPvB - assessment not available.

## 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

9001-92-7 Proteinase

· **Identification number(s)**

· **EC number:** 232-642-4

· **Index number:** 647-014-00-9

· **Description:**

· **MW:** ca. 34000

## 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Remove contaminated clothing immediately.

· **After eye contact:**

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 01/04/2018

Reviewed on 01/04/2018

**Trade name: Neutral Protease NB**  
from *Clostridium histolyticum*

(Contd. of page 2)

- **After swallowing:**  
Wash out mouth. Drink plenty of water and supply fresh air. Consult doctor if you feel unwell.
- **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 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
Formation of dangerous gases or vapours is possible in case of fire.  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation  
Avoid contact with the eyes and skin.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.
- **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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of dust.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store at +2 to +8 °C
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed and store in dry conditions.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.

(Contd. on page 4)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 01/04/2018

Reviewed on 01/04/2018

**Trade name: Neutral Protease NB**  
**from Clostridium histolyticum**

(Contd. of page 3)

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Store protective clothing separately.
  - Immediately remove all soiled and contaminated clothing.
  - Avoid contact with the eyes and skin.
  - Wash hands before breaks and at the end of work.
- **Breathing equipment:**
  - Short term filter device:
  - Filter P2
- **Protection of hands:**
  - Protective gloves
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  - 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.
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
  - Natural rubber, NR
  - Nitrile rubber, NBR
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

\*

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - Form:** Powder
  - Color:** beige to brown
  - Odor:** Odorless
- **Change in condition**
  - Melting point/Melting range:** no information available
  - Boiling point/Boiling range:** no information available
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Product is not flammable.
- **Danger of explosion:** Product is not explosive. However, formation of explosive dust-/air mixtures are possible.
- **Density:** no information available
- **Solubility in / Miscibility with**
  - Water:** Soluble.

(Contd. on page 5)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 01/04/2018

Reviewed on 01/04/2018

**Trade name: Neutral Protease NB**  
**from Clostridium histolyticum**

(Contd. of page 4)

· **Other information** No further relevant information available.

\*

## 10 Stability and reactivity

- **Reactivity** No further relevant informations available
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
 No decomposition if used according to specifications.  
 Denaturation of proteins by strong heating.
- **Possibility of hazardous reactions**  
 As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
- **Conditions to avoid thermal decomposition:** protein denaturation
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** In case of fire: See Section 5

\*

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**  
 Sensitization possible through inhalation.  
 Sensitization possible through skin contact.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

\*

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
 Water hazard class 1 (Self-assessment): slightly hazardous for water  
 Do not allow product to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

US

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 01/04/2018

Reviewed on 01/04/2018

**Trade name: Neutral Protease NB**  
from *Clostridium histolyticum*

(Contd. of page 5)

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Disposal must be made according to official regulations.
- **Uncleaned packagings:**
- **Recommendation:**  
Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- |  |  |
|--|--|
| · <b>UN-Number</b>   |  |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void   |
| · <b>UN proper shipping name</b>   |  |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void   |
| · <b>Transport hazard class(es)</b>  |  |
| · <b>DOT, ADN</b>  |  |
| · <b>Class</b>   | Void   |
| · <b>ADR, IMDG, IATA</b>   |  |
| · <b>Class</b>   | Void   |
| · <b>Label</b>   | -  |
| · <b>Packing group</b>   |  |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void   |
| · <b>Environmental hazards:</b>  |  |
| · <b>Marine pollutant:</b>   | No   |
| · <b>Special precautions for user</b>  | Not applicable.                                      |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                                      |
| · <b>Transport/Additional information:</b>                                       | Not dangerous according to the above specifications. |
| · <b>UN "Model Regulation":</b>  | Void   |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.
- **Proposition 65** Substance is not listed.
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenicity categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH)** Substance is not listed.

(Contd. on page 7)



# Safety Data Sheet

## acc. to OSHA HCS

Printing date 01/04/2018

Reviewed on 01/04/2018

**Trade name: Neutral Protease NB**  
**from Clostridium histolyticum**

(Contd. of page 6)

- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **GHS label elements**  
*The substance is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms** GHS07, GHS08
- **Signal word** Danger
- **Hazard statements**  
*Causes skin irritation.*  
*Causes serious eye irritation.*  
*May cause allergy or asthma symptoms or breathing difficulties if inhaled.*  
*May cause respiratory irritation.*
- **Precautionary statements**  
*Avoid breathing dust/fume/gas/mist/vapors/spray*  
*Wash thoroughly after handling.*  
*Use only outdoors or in a well-ventilated area.*  
*Wear protective gloves / eye protection / face protection.*  
*[In case of inadequate ventilation] wear respiratory protection.*  
*IF ON SKIN: Wash with plenty of water.*  
*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*  
*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*  
*Continue rinsing.*  
*Call a POISON CENTER/doctor if you feel unwell.*  
*Specific treatment (see on this label).*  
*If skin irritation occurs: Get medical advice/attention.*  
*If eye irritation persists: Get medical advice/attention.*  
*If experiencing respiratory symptoms: Call a POISON CENTER/doctor.*  
*Take off contaminated clothing and wash it before reuse.*  
*Store in a well-ventilated place. Keep container tightly closed.*  
*Store locked up.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **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 SDS:** Product safety department
- **Contact:** Tel.: +49 4122 712-242
- **Date of preparation / last revision** 01/04/2018 / -
- **Abbreviations and acronyms:**  
*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*  
*ICAO: International Civil Aviation Organisation*  
*PBT: persistent, bioaccumulative, toxic substance (REACH)*  
*vPvB: very persistent, very bioaccumulative substance (REACH)*  
*REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals*  
*CLP: Regulation on classification, labelling and packaging of substances and mixtures*  
*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*  
*IMDG: International Maritime Code for Dangerous Goods*  
*DOT: US Department of Transportation*  
*IATA: International Air Transport Association*  
*ACGIH: American Conference of Governmental Industrial Hygienists*  
*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*NFPA: National Fire Protection Association (USA)*  
*HMIS: Hazardous Materials Identification System (USA)*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*  
*NIOSH: National Institute for Occupational Safety*  
*OSHA: Occupational Safety & Health*

(Contd. on page 8)

US

**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 01/04/2018

Reviewed on 01/04/2018

**Trade name: Neutral Protease NB**  
**from Clostridium histolyticum**

(Contd. of page 7)

*TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A**Resp. Sens. 1: Respiratory sensitisation – Category 1**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3***. \* Data compared to the previous version altered.**

US