



Material Safety Data Sheet

Catalog Number: 193504
Revision date: 09-Jan-2012

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 193504

Product name: PROTEINASE K

Supplier:

MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA Exposure Limits: |
|--------------|------------|-----------|------------------------|-----------------------|
| PROTEINASE K | 39450-01-6 | 90 - 100% | None | None |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause skin irritation and/or dermatitis

Principle routes of exposure: Skin

Inhalation: May cause irritation of respiratory tract

Ingestion: May be harmful if swallowed.

Skin contact: May cause allergic skin reaction

Eye contact: Avoid contact with eyes

Statements of hazard MAY CAUSE ALLERGIC SKIN REACTION.

Statement of Spill or Leak - ANSI Label Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

4. FIRST AID MEASURES

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water and seek medical advice

Ingestion: Do not induce vomiting without medical advice.

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Protection of first-aiders: No information available

Medical conditions aggravated by exposure: None known

5. FIRE FIGHTING MEASURES

| | |
|---|---|
| Suitable extinguishing media: | Use dry chemical, CO ₂ , water spray or "alcohol" foam |
| Specific hazards: | Burning produces irritant fumes. |
| Unusual hazards: | None known |
| Special protective equipment for firefighters: | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear |
| Specific methods: | Water mist may be used to cool closed containers. |
| Flash point: | Not determined |
| Autoignition temperature: | Not determined |
| NFPA rating: | |
| NFPA Health: | 2 |
| NFPA Flammability: | 0 |
| NFPA Reactivity: | 0 |

6. ACCIDENTAL RELEASE MEASURES

| | |
|-----------------------------------|--|
| Personal precautions: | Use personal protective equipment. |
| Environmental precautions: | Prevent product from entering drains. |
| Methods for cleaning up: | Sweep up and shovel into suitable containers for disposal. |

7. HANDLING AND STORAGE

| | |
|-------------------------------|---|
| Storage: | |
| +4°C | |
| DESICCATE | |
| Handling: | Use only in area provided with appropriate exhaust ventilation. |
| Safe handling advice: | Wear personal protective equipment. |
| Incompatible products: | Oxidising and spontaneously flammable products |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.



9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------------|---------------------------------|
| Physical state: | Powder |
| Formula: | Not applicable |
| Molecular weight: | est. 30 kDa |
| Melting point/range: | No data available at this time. |
| Boiling point/range: | No Data available at this time. |
| Density: | No data available |
| Vapor pressure: | No data available |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------------|-------------------|
| Evaporation rate: | No data available |
| Vapor density: | No data available |
| Solubility (in water): | Soluble |
| Flash point: | Not determined |
| Autoignition temperature: | Not determined |

10. STABILITY AND REACTIVITY

| | |
|--|--|
| Stability: | Stable under recommended storage conditions. |
| Polymerization: | None under normal processing. |
| Hazardous decomposition products: | Thermal decomposition can lead to release of irritating gases and vapours such as carbon oxides. |
| Materials to avoid: | Strong oxidising agents |
| Conditions to avoid: | Exposure to air or moisture over prolonged periods. |

11. TOXICOLOGICAL INFORMATION

Product Information

Acute toxicity

Components
PROTEINASE K

RTECS Number:
Not Available

Selected LD50s and LC50s
Not Determined

| | |
|-------------------------------|---|
| Chronic toxicity: | Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness. |
| Local effects: | Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. |
| Specific effects: | May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache. |
| Primary irritation: | No data is available on the product itself. |
| Carcinogenic effects: | No data is available on the product itself. |
| Mutagenic effects: | No data is available on the product itself. |
| Reproductive toxicity: | No data is available on the product itself. |

12. ECOLOGICAL INFORMATION

| | |
|-----------------------------|---|
| Mobility: | No data available |
| Bioaccumulation: | No data available |
| Ecotoxicity effects: | No data available |
| Aquatic toxicity: | May cause long-term adverse effects in the aquatic environment. |

| | | | |
|-------------------|---|---|--|
| Components | U.S. DOT - Appendix B - Marine Pollutant | U.S. DOT - Appendix B - Severe Marine Pollutants | United Kingdom - The Red List: |
| PROTEINASE K | Not Listed | Not Listed | Not Listed |
| Components | Germany VCI (WGK) | World Health Organization (WHO) - Drinking Water | Ecotoxicity - Fish Species Data |
| PROTEINASE K | Not Listed | Not Listed | Not Listed |
| Components | Ecotoxicity - Freshwater Algae Data | Ecotoxicity - Microtox Data | Ecotoxicity - Water Flea Data |
| PROTEINASE K | Not Listed | Not Listed | Not Listed |

| | | | |
|-------------------|----------------------------------|--|---|
| Components | EPA - ATSDR Priority List | EPA - HPV Challenge Program Chemical List | California - Priority Toxic Pollutants |
| PROTEINASE K | Not Listed | Not Listed | Not Listed |

| | | |
|-------------------|---|---|
| Components | California - Priority Toxic Pollutants | California - Priority Toxic Pollutants |
| PROTEINASE K | Not Listed | Not Listed |

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging: Do not re-use empty containers

14. TRANSPORT INFORMATION

DOT:
Proper shipping name: Not Regulated

U.S. DOT - Appendix A Table 1 - Reportable Quantities Not Listed

TDG (Canada):

IMDG/IMO

IMDG - Hazard Classifications Not Applicable

U.S. DOT - Appendix B - Marine Pollutant Not Listed
U.S. DOT - Appendix B - Severe Marine Pollutants Not Listed

IMO-labels:

15. REGULATORY INFORMATION

International Inventories

PROTEINASE K
Inventory - United States TSCA - Sect. 8(b) Not Listed
Canada DSL Inventory List - Not Listed
Inventory - China: Listed
EU EINECS List - Listed

U.S. regulations:

| | | | | |
|-------------------|----------------------------------|--|---------------------------------------|---|
| Components | California Proposition 65 | Massachusetts Right to Know List: | New Jersey Right to Know List: | Pennsylvania Right to Know List: |
| PROTEINASE K | - Not Listed | Not Listed | Not Listed | Not Listed |

| Components | Florida substance List: | Rhode Island Right to Know List: | Illinois - Toxic Air Contaminants | Connecticut - Hazardous Air Pollutants |
|--------------|--|---|-----------------------------------|--|
| PROTEINASE K | Not Listed | Not Listed | Not Listed | Not Listed |
| Components | SARA 313 Emission reporting/Toxic Release of Chemicals | CERCLA/SARA - Section 302 Extremely Haz | NTP: | IARC: |
| PROTEINASE K | Not Listed | Not Listed | None | None |

SARA 313 Notification: The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Ammendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification: The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

16. OTHER INFORMATION

Prepared by: Health & Safety

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, MP Biomedicals does not guarantee the accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage maybe required. MP Biomedicals assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

End of Safety Data Sheet