Material Safety Data Sheet

1. Identification of substance/mixture and company information

Product : 54001 Neosilk® - Human Type Collagen Ⅰ

Product detail : Human Type Collagen (Lyophilized)

Manufacturer /Supplier of the safety data sheet:
Immuno-Biological Laboratories Co., Ltd.
1091-1 Naka, Fujioka-shi, Gunma 375-0005, JAPAN
TEL: +81 (0)274-22-2889 FAX: +81 (0)274-23-6055
URL: http://www.ibl-japan.co.jp/eng/ E-Mail: do-ibl@ibl-japan.co.jp

2. Composition/information on ingredients

Substance name: Human Type collagen
Alternative name: Non-prolyl hydroxylated α1 chain of human type Ⅰ collagen

3. Hazard identification

No hazardous substance classified under GHS is found.

4. First aid measures

Eye contact: Immediately irrigate eyes with copious amounts of clean fresh water for at least 15 minutes if eyes contact with the substance even if the amount is small. Seek medical attention.
Skin contact: After contact with skin, immediately wash with soap solution or plenty of water.
Inhalation: If inhaled, remove to fresh air and conduct artificial respiration if necessary. Seek medical attention.
Ingestion: If ingested, immediately wash out mouth with water. Seek medical attention.

5. Fire fighting measures

Suitable extinguishing media: Water spray, dry chemical extinguisher, .CO2
Specific hazard in fire: No data is available.
Specific instruction for extinction: No data is available.
Fire fighting procedures: Extinguishing from windward side and wear self-contained breathing apparatus if necessary.

6. Accidental release measures

Measures for environmental protection:
Collect the spilled out substance and put it in a dried container as much as possible and wash it out with plenty of water. Avoid flow it into the river and collect it with sand or other nonflammable absorbents if it is drained.

7. Handling and storage

Precautions: Avoid contact with skin and eyes and wear appropriate protective equipment during work. Well ventilating the work area. Caution for contact with strong oxidant. Well washing hands, face, etc. and gargling. Seal used container after use.

Storage: Avoid direct sunlight and keep the container in cool place. Seal the container for avoiding oxidation.

8. Exposure control and personal protection gear

Facility control: Conceal the place of source origin and install a local exhaust ventilation if the substance is used indoors. Install hand-wash and eye-wash station near work area.
Concentration control / Work area assessment criteria: Not established.
Personal protection:
Respiratory – wear a respirator to prevent inhalation of dust.
Hands – ware protection gloves
Eyes – wear safety glasses (goggle type).
Skin – wear a long-sleeved work coat
Hygiene control : Change masks or absorptive agents regularly or each time use.

9. Physical and chemical properties

Molecular weight: Approx. 100kDa
Appearance: Powder
Colour: White
Odour: Odourless
pH: No data is available.
Boiling point: No data is available.
Melting point: No data is available.
Flash point/Flammable point: No data is available.
Explosive limit: No data is available.
Vapour pressure: No data is available.
Density: No data is available.
Solubility: Readily soluble in water

10. Stability and reactivity

Stability: Stable under ordinary pressure at room temperature.
Reactivity: Stable
Conditions should be avoided: No data is available.
Materials should be avoided: Strong oxidant
Hazardous degradable living substance: Nitrogen oxide

11. Toxicological information

Acute Toxicity: No toxicity is found (Single dose oral toxicity test).
Local Effects:
Skin: No skin irritation is found. (Alternative method for primary skin irritable test, human patch test).
Eyes: No eyes irritation is found. (Alternative method for eye irritable test).
Mutagenic/Carcinogenic property: Negative (Bacterial reverse mutation test)
Skin sensitization: No data is available.

12. Ecological information

Mobility: No data is available.
Persistency/Degradability: No data is available.
Bioaccumulation potential: No data is available.
Ecotoxicity: No data is available..

13.Disposal consideration

The substance and/or the container should be disposed by professional industrial waste disposal contractors permitted by prefectural governors.

14. Transport information

United Nations Classification: N/A
Caution for Transport: The containers should be well packed and protected by appropriate packing materials in order to avoid damages the containers. Avoid direct sunlight and water leakage.

15. Regulations

Fire Laws: N/A
Poisonous and Deleterious Substances Control Law: N/A
Occupational Safety and Health Act: N/A
Pollutant Release and Transfer Register (PRTR): N/A

16. Other information

Cited reference

1. The Merck Index 13th Edition 4393
2. STN International RTECS File
3. NITE GHS classification manual (2006.2.10)
4. Documentation manual for MSDS (Revision No.2) (Japan Chemical Industry Association)

Disclaimer

The information provided on this material safety data sheet (MSDS) is to be the best of the company's knowledge at that time of documentation of this MSDS. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expenses, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness and completeness of such information for his own particular use.

The information may be updated or modified without notifying the users if any new information become available. It has been known the substance described on this MSDS is safe for applying to human body as the substance is equivalent to human origin collagen, however, the users should establish own use conditions for safety to use under user's responsibility if the substance to be used for animal tests on purpose to applying to drug development and/or using it as a material of cosmetics. The users should be responsible for establishing an appropriate safety control policy for each use environment if the substance is used under specific conditions.