

Material Safety Data Sheet

Version No.: 1.0(Rev. date : 2023-07-16)

**AccuNanoBead™ Protein L Magnetic
NanoBeads**

1. Product and Company Information

A. Product Name : *AccuNanoBead™* Protein L Magnetic NanoBeads

B. Recommended Use : For Research Use Only

C. Supply Information :

 Company : Bioneer Address : 8-11 Munpyeongseo-ro, Daedeok-gu, Daejeon 34302, Republic of Korea Emergency telephone number : 82-42-930-8777

2. Product and Company Information

A. Risk-Hazard Classification : Specific target organ toxicity (repeat exposure) : Class 2

B. Caution Items Including Preventative measures

 Pictogram Signal word : Caution Hazard statement(s) : H373 May cause damage to (specific target organs) under chronic or repeated exposure Precautionary statements : P260 Do not breathe dust/fume/gas/mist/vapours/sprayC. Other Risks-Hazards Not Included in Risk-Hazard Classification (NFPA) : No information.

3. Composition/Information on ingredient

FERRIC-FERROUS OXIDE	BLACK IRON OXIDE	1317-61-9	90
Silicon Dioxide	SILICA	7631-86-9	10

4. First aid measure

- A. Upon Eye contact : Rinse thoroughly with plenty of water for at least 20 minutes.
 - B. Upon Skin Contact : Rinse thoroughly with plenty of water for at least 20 minutes.
 - C. Upon Inhalation: Seek medical attention if exposure or contact is suspected.
 - D. Upon Ingestion : Seek medical attention if exposure or contact is suspected.
 - E. The most important acute and delayed symptoms/effects : No information.
 - F. Notes to Physician : No Information.
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5. Fire-fighting measures

- A. Proper(Improper) Extinguishing Material : Nonflammable product.
 - B. Specific Hazards from Chemicals : No Information.
 - C. Firefighting Protection and Precautions : Rescuers must wear appropriate protection.
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6. Accidental release measures

- A. Measures and Protection for : Immediately wipe spills and follow prevention measures.
 - B. Measures for Environmental Protection : Prevent introduction into waterways, sewers, basements and sealed spaces.
 - C. Cleaning and Removal Measures : Absorb liquids and clean contaminated area with ethanol.
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7. Handling and storage

- A. Handling Precautions : Be aware of conditions and chemicals to avoid.
 - B. Storage Precautions : Keep refrigerated.
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8. Exposure controls / personal protection

- A. Chemical Exposure Standards, Biological Exposure Standards Etc. : No information.
 - B. Proper Physical Management : No Information.
 - C. Personal Protection
 - Respiratory Protection : wear respiratory mask approved by KOSHA(Korea Occupation Safety Health Agency)
 - Eye Protection : wear Chemical Safety protective goggle or glasses approved by KOSHA(Korea Occupation Safety Health Agency)
 - Hand Protection : wear Chemical Safety gloves approved by KOSHA(Korea Occupation Safety Health Agency)
 - Body Protection : wear protective clothes approved by KOSHA(Korea Occupation Safety Health Agency)
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9. Physical and chemical properties

- A. Appearance : Black powder
- B. Odor : None
- C. Odor threshold : No Information
- D. pH : No Information
- E. Melting point/Freezing point : No Information
- F. Initial boiling point/range : No Information
- G. Flash point : No Information
- H. Evaporation rate : No Information
- I. Flammability(Solid, Liquid) : Nonflammable
- J. Flammability Limits upper/lower : No Information
- K. Vapor pressure : No Information
- L. Solubility : No Information
- M. Vapor density : No Information
- N. Viscosity : No Information
- O. n octanol/water partition coefficient : No Information
- P. Autoignition temperature : No Information
- Q. Decomposition temperature : No Information
- R. Specific gravity : No Information
- S. Molecular weight : No Information

10. Stability and Reactivity

- A. Stability : Stable under recommended storage conditions.
- B. Possibility of harmful response : No Information.
- C. Conditions to avoid (electric discharge, impact, vibration etc) : Ignition source of Heat, spark, flame
- D. Material to avoid : Strong acids.
- E. Hazardous Decomposition Products : No Information.

11. Toxicological information

A. Probable Exposure Path

- Respiratory : can be harmful if inhaled.
- Ingestion : can be harmful if swallowed.
- Eye/Skin : Harmful in contact with skin. Can be caused skin irritation.

B. Health Hazard Information

- Acute Toxicity : No Information.
- Skin corrosive or irritant : can be caused skin irritation.
- Serious eye damage or irritant : can be caused eye irritation.
- Respiratory Hypersensitivity : No Information.
- Skin Hypersensitivity : No Information.
- Carcinogenic Properties : No Information.
- Reproductive Cell Mutation Properties : No Information.
- Reproductive Toxicity : No Information
- Target Organ Toxicity (Single Exposure) : No Information
- Target Organ Toxicity (Repeat Exposure) : No Information
- Inhalation Toxicity : No Information

C. Numerical measures of toxicity(Acute toxicity estimates etc) : No Information

12. Ecological information

- A. Biological Toxicity : No Information
 - B. Persistency and Degradability : No Information
 - C. Bioconcentration : No Information
 - D. Soil Mobility : No Information
 - E. Other Toxic Effects : No Information
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13. Disposal considerations

- A. Waste disposal method : Dispose of material material in accordance with formally disposal company.
 - B. Disposal Considerations : Dispose contents and vessel in accordance with regulation by the waste disposal law.
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14. Transport information

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- A. UN number : N/A
 - B. UN Proper Shipping Name : N/A
 - C. Shipping Hazard Classification : N/A
 - D. Container Classification : N/A
 - E. Marine Pollutant : N/A
 - F. Special Safety Measures for Users Regarding Shipping or Shipping Measure: N/A
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15. Regulatory information

- A. Industrial Safety and Health Regulation : No Information
 - B. Hazardous Chemical Management Regulation : No Information
 - C. Dangerous Material management Regulation : No Information
 - D. Waste Management Regulation : No Information
 - 마. Other Domestic and Foreign Regulation : No Information
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16. Other References

- A. Source of Information : Korean Occupational Safety & Health Agency
 - B. Initial Issue Date : 2020-02-06
 - C. Revision Count and Latest Revision Date : 1.0 / 2023-07-16
 - D. Other : Bioneer Corporation makes no warranty or representation to its completeness, accuracy or currency. This material is intended for use by persons with pertinent technical skills and at their discretion and risk. It is the responsibility of the user to determine the product's suitability for its intended use, the product's safe use, and the product's proper disposal. Disposal of hazardous material may be subject to federal, state or local laws or regulations.
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