Safety Data Sheet

1 Chemical Product and Company Identification
Identification of the product
Product Code
Creatine amidinohydrolase
CRH-211
Supplier
Name
TOYOBO CO., LTD.
Address
2-8, Dojimahama 2-chome Kita-ku, Osaka 530-8230, Japan
Department
Biotechnology Overseas Sales and Marketing Department
Phone
+81-6-6348-3843
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+81-6-6348-3833
Recommended use and restrictions on use
diagnostic product

2 Hazard Identification
Most Important Hazards and Effects
The product might cause allergic reactions upon inhaling or skin contact because of the protein contained.

GHS classification
Classification not possible

3 Composition/Information on Ingredients
Substance/Mixture
Mixture
Chemical Nature
Creatine amidinohydrolase
CAS# 37340-58-2
Chemical specificity
Freeze and drying powder including enzyme
Concentration or concentration range
ca. 56%(W/W)
Stabilizer, etc
ca. 44%
Ingredients Contributing to the Hazard
The ingredients known as hazardous are not included.

4 First Aid Measures
Inhalation
Remove to fresh air. Consult a physician when unpleasantness occurs.
Skin Contact
Wash off with plenty of water. Consult a physician when inflammation on the skin occurs.
Eye Contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion
Rinse mouth. Swill plentiful amount of water or milk for immediate vomiting. Consult a physician.

5 Fire Fighting Measures
Specific extinguishing methods
Water spray, dry chemical powder, or carbon dioxide etc.
Precautions for fire-fighters
Firefighter should work from the windward side.

6 Accidental Release Measures
Personal Precautions, protective equipment and emergency procedure.
Wear protective gear to avoid eye/skin contact and inhalation. Do not work at leeward.
Environmental Precautions
High concentrated waste fluid should not be directly discharged into rivers.
Methods and materials for containment and cleaning up.
Take up under vacuum using dust collecting filter, wash residual spill with copious amounts of water. Use cloth, paper or anything similar to soak up the solution leaking out of the container.
(Waste water should be treated with activated sludge or adsorbed with activated carbon etc.)
7 Handling and Storage

Handling

Technical Measures

Wear protective gear to avoid eye/skin contact and inhalation.

Precautions

Do not drop the container to prevent the content popping out.

Storage

Technical Measures

Keep sealed container in freezer.

Incompatible substances and mixtures

None specified.

Storage Conditions

Store under -20°C to avoid deactivating.

Packaging Materials

Use the initial container of the product.

8 Exposure Controls/Personal Protection

Engineering controls

Provide shower and eye washing apparatus nearby.

Occupational exposure limit, biological limit

Not applicable.

Personal Protective Equipment

Respiratory Protection

Protecting mask

Hand Protection

Protecting gloves

Eye Protection

Safety goggles

Skin and Body Protection

Long sleeve working wear

9 Physical and Chemical Properties

Physical State, form and colour

Powder / White

Odour

No odour

pH

ca. pH 6.0 (1% W/V)

Flash Point

No information available.

Explosiveness

No information available.

Density

No information available.

Solubility

Freely soluble in water.

10 Stability and Reactivity

Stability

Stable at temperatures below -20°C. When left for long at room temperature, proteins might be degraded, which does not cause any hazardous reaction.

Possible hazard reactions at specific condition

Prolonged storage under higher temperature than room temperature and high humidity.

Conditions to avoid

May react with strong oxidizing compound.

Materials to avoid

No information available.

Hazardous Decomposition Products

No information available.

11 Toxicological Information

Acute Toxicity

No information available.

Skin corrosion/irritation

No information available.

Eye damage/irritation

No information available.

Sensitization

Might cause allergic reactions upon inhaling or skin contact because of the protein contained.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Toxic to reproduction

No information available.

Specific target organ toxicity

No information available.

(Single exposure)

No information available.

Specific target organ systemic toxicity

No information available.

(Repeated exposure)

No information available.

Aspiration toxicity

No information available.
12 Ecological Information
Persistence/Degradability

This product is biodegradable and does not remain on the environment for long.

13 Disposal Considerations
Residues
A pollution container and packing

Dispose of in accordance with all applicable local and Wash with copious amounts of water and waste conforming to local regulations depending on the type of the material.

14 Transport Information
International regulations
IMO information
Not applicable
IATA information
Not applicable
Domestic regulations
Rail and road transportation information
Not applicable
Marine transportation information
Not applicable
Aviation transportation information
Not applicable
Specific precautions transport measures and conditions
Avoid direct sunshine and check the container and loading to prevent leakage or turnover, fall and damage. Transport in accordance with regulations. Do not load with foods and feed. Keep at temperatures below -20°C.

15 Regulatory Information
Regulations
Follow all of laws and regulations in your country.

16 Other Information
Notice

The information shall not be taken as being all inclusive and is to be used only a guide. All materials and mixtures may be present unknown hazards and should be used with caution. The SDS is subject to revision as new information becomes available. The information in this SDS, to the best of our knowledge, is accurate and correct. However, TOYOBÖ makes no warranty and assumes no liability whatsoever in connection with any use of this information.