1 Chemical product and company identification

Identification of the product
Product Code GTD-209 / 309 / 409
Supplier
Name TOYOBKO 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
Fax +81-6-6348-3833
Recommended use and restrictions on use diagnostic product

2 Hazard Identification

Most Important Hazards and Effects
Harmful if Sodium azide is swallowed.
Insufficient data are available on the effect of this substance on human health, therefore care must be taken.
GHS classification Classification not possible

3 Composition/Information on Ingredients

Substance/Mixture Mixture
Chemical Nature Gultamate dehydrogenase
Chemical specificity Freeze and drying powder including enzyme
Concentration or concentration range ca. 2-4%(W/V)
CAS# 9029-11-2
Stabilizer, etc ca. 96-98% (W/V)
Common Chemical name Sodium azide
Concentration or concentration range ca. 0.05% (W/V)
Chemical formula NaN_3
CAS# 26628-22-8

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. If eye irritation persists, get medical advise/attention.

Ingestion
Rinse mouth. Swill plentiful amount of water or milk for immediate vomiting. Consult a physician.

5 Fire Fighting Measures

Extinguishing Media
Water spray, dry chemical powder, or carbon dioxide etc.

Precautions for fire-fighters
Avoid working at leeward.

6 Accidental Release Measures

Personal Precautions, protective equipment and emergency procedure.
Environmental Precautions
Methods and materials for containment and cleaning up.

Wear proper protective gear to avoid eye/skin contact and inhalation. Work from the windward side.
High concentrated waste fluid should not be directly discharged into rivers.
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 refrigerator.

Incompatible substances and mixtures
None specified.

Storage Conditions
Store at 4°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 equipment nearby.

Occupational exposure limit, biological limit
(ACGIH) Sodium azide TLV: 0.29mg/m³

Personal Protective Equipment
Protecting mask
Protecting gloves
Safety goggles
Long sleeve working wear

9 Physical and Chemical Properties

Physical State, form and color
Liquid

Odour
Colorless/No odour
ca. pH 7.8 (1% W/V)

Flash Point
No information available.

Explosiveness
No information available.

Density
ca. 1.0g/cm³ (4°C)

Solubility
Freely soluble in water.

10 Stability and Reactivity

Stability
Stable at 2-8°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.

Conditions to avoid
Compound which decompose strong acid or strong alkali protein.

Materials to avoid

Hazardous Decomposition Products
Nitric monoxide, metal azide, hydrazoic acid.

11 Toxicological Information

Acute Toxicity (Oral)
(Sodium azide) LD₅₀ 27mg/Kg

Skin corrosion/irritation
May cause serious corrosion on skin with sodium azide. No information as products.

Serious eye damage/irritation
May cause serious eye damage with sodium azide. No information as products.

Sensitization
No information available.

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)

Specific target organ toxicity
No information available.

(Repeated exposure)

Aspiration hazards
No information available.
12 Ecological Information
Persistence/Degradaibility

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

13 Disposal Considerations
Residues

Dispose in accordance with all applicable local and national laws and regulations. May cause explosion by any shock under dried condition, because sodium azide is easy to combine with heavy metal. Wash off drainpipe with plenty of water not to keep residues in after draining. Wash with copious amounts of water and waste conforming to local regulations depending on the type of the material.

A pollution container and packing

14 Transport Information
International regulations
IMO information
Not applicable
IATA information
Not applicable
Domestic regulations
Not applicable
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 2-8°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, TOYOBO makes no warranty and assumes no liability whatsoever in connection with any use of this information.