

1. IDENTIFICATION

Product name: 2-Picoline borane complex

CAS No. : 3999-38-0

Brand: Macklin

Company: Shanghai Macklin Biochemical Co.,Ltd.

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Revision date: 2019/12/12

2. HAZARDS IDENTIFICATION

GHS classification

PHYSICAL HAZARDS

Substances and mixtures which, in contact with Category 2 water, emit flammable gases

HEALTH HAZARDS

Acute toxicity (Oral) Category 4

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

ENVIRONMENTAL HAZARDS

Not classified

GHS label elements, including precautionary statements

Pictograms or hazard symbols

Signal word

Danger

Hazard statements

In contact with water releases flammable gases

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

Precautionary statements

[Prevention]

Keep away from any possible contact with water, because of violent reaction and possible flash fire.

Handle under inert gas. Protect from moisture.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Wear protective gloves/eye protection/face protection.

[Response]

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Gently wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

In case of fire: Do not use water for extinction.

[Storage]

Store in a dry place. Store in a closed container.

[Disposal]

Dispose of contents/container through a waste management company authorized by the local government.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: 2-Picoline borane complex

CAS No.: 3999-38-0

Chemical Formula: $C_6H_7N \cdot BH_3$

4. FIRST AID MEASURES

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical advice/attention if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

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 advice/attention.

Ingestion: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing Dry chemical, dry sand.

media:

Unsuitable extinguishing Water

media:

Specific hazards arising Explosion risk in case of fire. Fight fire remotely due to the risk of explosion. from the chemical: Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Precautions for firefighters: Fire-extinguishing work is done from the windward and the suitable fire-extinguishing

method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water but NO direct contact with water. Eliminate all ignition sources if safe to do so.

Special protective When extinguishing fire, be sure to wear personal protective equipment. equipment for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, Use personal protective equipment. Keep people away from and upwind of spill/leak.

protective equipment and Entry to non-involved personnel should be controlled around the leakage area by

emergency procedures: roping off, etc.

Environmental precautions: Prevent product from entering drains.

Methods and materials for Sweep dust to collect it into an airtight container, taking care not to disperse it.

containment and cleaning Adhered or collected material should be promptly disposed of, in accordance with

up: appropriate laws and regulations.

Prevention of secondary Do not allow contact with water. Remove all sources of ignition. Fire-extinguishing

hazards: devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment. Since there is a possibility of igniting behind when removal of a leakage thing is imperfect, it is careful enough.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical measures: Handling is performed in a well ventilated place. Wear suitable protective equipment.

Be careful not to cause leakage, overflow, or dispersion. Steam should not be generated unnecessarily. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Avoid shock and friction. Wash hands and face before breaks and immediately after handling the product.

Use a local exhaust if dust or aerosol will be generated.

Advice on safe handling: Avoid contact with skin, eyes and clothing.

Keep away from any possible contact with water, because of violent reaction and possible flash fire.

Use well-dried equipment.

Handle under inert gas.

Don't leave used equipment or rag. This product may ignite if it is left stuck on combustibles such as paper, rags, etc. Conditions for safe storage, including any

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Store under inert gas.

Protect from moisture.

Be sure not to give the container unexpected impacts, such as falling down or falling off.

Store away from incompatible materials such as oxidizing agents.

Moisture-sensitive

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Install a closed system or local exhaust as possible so that workers should not be

exposed directly. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Safety glasses. A face-shield, if the situation requires.

Skin and body protection: Protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal- Powder

Colour: White - Pale yellow

Odour: No data available

pH: No data available

Melting point/freezing point: 48°C

Boiling point/range: No data available

Flash point: No data available

Flammability or explosive
limits:

Lower: No data available

Upper: No data available

Relative density: No data available

Solubility(ies):

[Water] No data available

[Other solvents]
Soluble: Acetonitrile

10. STABILITY AND REACTIVITY

Chemical stability: Stable under proper conditions.

Possibility of hazardous May explosively decompose on heating, shock, friction, etc.

reactions: May spontaneously ignite or release flammable gases when in contact with water.

Conditions to avoid: Heat, Shock, Friction, Moisture

Incompatible materials: Oxidizing agents, Water

Hazardous decomposition Carbon monoxide, Carbon dioxide, Nitrogen oxides (NO_x), Boron oxides products:

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye No data available

damage/irritation:

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC = No data available

NTP = No data available

Reproductive toxicity: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available

Crustacea: No data available

Algae: No data available

Persistence / degradability: No data available

Bioaccumulative No data available

potential(BCF):

Mobility in soil

Log Pow: No data available

Soil adsorption (K_{oc}): No data available

Henry's Law No data available

constant(PaM³/mol):

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. Take precautions against ignition. Observe all federal, state and local regulations when disposing of the substance

14. TRANSPORT INFORMATION

Hazards Class: 4.3: Substance which, in contact with water, emit flammable gases.

UN-No: 2813

Proper shipping name: Water-reactive solid, n.o.s.

Packing group: II

15. REGULATORY INFORMATION

Regulations on the Control over Safety of Dangerous Chemicals (State Council announces on January 26, 2002 and revised on February 16, 2011): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

16. OTHER INFORMATION

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the

products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.