



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: 2-Butyne-1,4-diol
Product code: B0749
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Revision number: 1

2. HAZARDS IDENTIFICATION

Classification of the GHS

PHYSICAL HAZARDS

Not classified

HEALTH HAZARDS

Acute toxicity (Oral) Category 3
Acute toxicity (Dermal) Category 4
Acute toxicity (Inhalation) Category 3
Skin corrosion/irritation Category 1C
Serious eye damage/eye irritation Category 1
Skin sensitization Category 1

ENVIRONMENTAL HAZARDS

Acute aquatic toxicity Category 3

GHS label elements

Pictograms or hazard symbols



Signal word

Danger

Hazard statement

Toxic by inhalation and if swallowed
 Harmful in contact with skin
 Causes severe skin burns and eye damage
 May cause an allergic skin reaction
 Harmful to aquatic life

Precautionary statements

[Prevention]

Do not breathe.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.
 Do not eat, drink or smoke when using this product.
 Contaminated work clothing should not be allowed out of the workplace.
 Wash hands thoroughly after handling.
 Wear protective gloves and eye/face protection.

2. HAZARDS IDENTIFICATION**[Response]**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Immediately call a POISON CENTER or doctor/physician.

[Storage]

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

[Disposal]

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

| | |
|---------------------------|---|
| Substance/mixture: | Substance |
| Component(s): | 2-Butyne-1,4-diol |
| Percent: | >99.0%(GC) |
| CAS Number: | 110-65-6 |
| Synonyms: | 1,4-Dihydroxy-2-butyne , 1,2-Dihydroxydimethylacetylene |
| Chemical Formula: | C ₄ H ₆ O ₂ |

4. FIRST AID MEASURES**Inhalation:**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin contact:

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.

Eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion:

Immediately call a POISON CENTER or doctor/physician. 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 media:**

Dry chemical, foam, water spray, carbon dioxide.

Specific methods:

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: Remove movable containers if safe to do so.

Special protective equipment for firefighters:

When extinguishing fire, be sure to wear personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures:**

Use extra personal protective equipment (P3 filter respirator for toxic particles). Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions:

Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Handling

Technical measures: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.

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

Storage

Storage conditions: Keep container tightly closed. Store in a refrigerator. Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents.

Packaging material: Law is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Install a closed system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.

Hand protection: Impervious gloves.

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid
Form: crystal - powder
Color: White - Slightly pale yellow
Odor: No data available
pH: No data available
Melting point/freezing point: 58 °C
Boiling Point/Range: 238 °C
Flash Point: No data available
Explosive limits
Lower: No data available
Upper: No data available
Vapor Pressure: <13Pa/20°C
Density: No data available
Solubility: Soluble in : Water Alcohol Acetone
Very slightly soluble in: Ether Benzene Chloroform
log Pow = -0.73

10. STABILITY AND REACTIVITY

Stability: Strongly hygroscopic (deliquescent).
Reactivity: No special reactivity has been reported.
Conditions to avoid: Heat-sensitive, Hygroscopic
Incompatible materials: oxidizing agents, strong acids, halogens, alkali , mercury salts
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: ipr-rat LD50:52.435 mg/kg
orl-rat LD50:105 mg/kg

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available

11. TOXICOLOGICAL INFORMATION

Germ cell mutagenicity: No data available
Carcinogenicity:
IARC = No data available
NTP = No data available
Reproductive toxicity: No data available
 RTECS Number: ES0525000

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Fish: No data available
Crustacea: No data available
Algae: No data available
Persistence / degradability: No data available
Bioaccumulative potential(BCF): No data available
Mobility in soil
log Pow: -0.73
Soil adsorption (Koc): No data available
Henry's Law constant(PaM³/mol): No data available

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class: 6.1: Toxic substance.
UN-No: 2716
Proper shipping name: 1,4-Butynediol
Packing group: III

15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

The list of a dangerous chemical(2002)/CN-No.: 61582

16. OTHER INFORMATION

The reference company name of written contents

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