

## Chemical Safety Data Sheet MSDS / SDS

**O-Benzylhydroxylamine**

Revision Date:2026-05-31 Revision Number:1

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : O-Benzylhydroxylamine  
CBnumber : CB6853994  
CAS : 622-33-3  
EINECS Number : 612-969-2  
Synonyms : O-benzylhydroxylamine,O-Benzylhydroxylamine HCl

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 010-86108875

**SECTION 2: Hazards identification****GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word

Danger

**Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P405 Store locked up.

**Hazard statements**

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

## SECTION 3: Composition/information on ingredients

### Substance

Product name	: O-Benzylhydroxylamine
Synonyms	: O-benzylhydroxylamine,O-Benzylhydroxylamine HCl
CAS	: 622-33-3
EC number	: 612-969-2
MF	: C7H9NO
MW	: 123.15

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## SECTION 4: First aid measures

### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

### Inhalation

Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration.

### Ingestion

Do NOT induce vomiting. Get medical attention.

### Most important symptoms and effects

No information available.

### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### Notes to Physician

Treat symptomatically.

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## SECTION 5: Firefighting measures

### Suitable Extinguishing Media

CO2, dry chemical, dry sand, alcohol-resistant foam.

### Extinguishing media which must not be used for safety reasons

No information available.

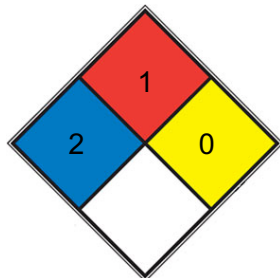
### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA 704



HEALTH 2 Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. [diethyl ether](#), ammonium phosphate, iodine)

FIRE 1 Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. [mineral oil](#), ammonia)

REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, [N<sub>2</sub>](#))

SPEC.

HAZ.

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## SECTION 6: Accidental release measures

### Personal Precautions

Use personal protective equipment as required. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing.

### Environmental Precautions

Avoid release to the environment.

### Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

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## SECTION 7: Handling and storage

### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

### Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

### Specific Use(s)

Use in laboratories

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## SECTION 8: Exposure controls/personal protection

### Control Parameters

### Exposure Controls

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

### Personal protective equipment

#### Eye Protection

Goggles (European standard - EN 166)

#### Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber	See manufacturers	-	EN 374	(minimum requirement)
Neoprene	recommendations			
Natural rubber				
PVC				

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g.

sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

#### Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

#### Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Organic gases and vapours filter Type A Brown conforming to

EN14387

#### **Small scale/Laboratory use**

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141

When RPE is used a face piece Fit Test should be conducted

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

#### **Environmental exposure controls**

No information available.

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## **SECTION 9: Physical and chemical properties**

### **Information on basic physicochemical properties**

Colorless

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#### **Physical State**

Liquid

#### **Odor**

No information available

#### **Odor Threshold**

No data available

#### **pH**

8 (47g/l, H<sub>2</sub>O)

#### **Melting Point/Range**

No data available

#### **Softening Point**

No data available

#### **Boiling Point/Range**

110 - 112 °C / 230 - 233.6 °F @ 20 mmHg

#### **Flash Point**

No information available

Method - No information available

#### **Evaporation Rate**

No data available

**Flammability (solid,gas)**

Not applicable Liquid

**Explosion Limits**

No data available

**Vapor Pressure**

2.09 hPa (58 °C)

**Vapor Density**

No data available (Air = 1.0)

**Specific Gravity / Density**

1.19

**Bulk Density**

Not applicable Liquid

**Water Solubility**

Soluble

**Solubility in other solvents**

No information av

**Partition Coefficient (n-octanol/water)**

No data available

**Autoignition Temperature**

No data available

**Decomposition Temperature**

No data available

**Viscosity**

No data available

**Explosive Properties**

No information av

**Oxidizing Properties**

No information av

**Molecular Formula**

C7 H9 N O

**Molecular Weight**

123.15

**Colour**

Clear colorless

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**SECTION 10: Stability and reactivity****Stability**

Stable under normal conditions.

**Hazardous Reactions**

No information available.

**Hazardous Polymerization**

No information available.

**Conditions to Avoid**

Incompatible products. Excess heat.

**Materials to avoid**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

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**SECTION 11: Toxicological information****Product Information**

No acute toxicity information is available for this product

**(a) acute toxicity;****(b) skin corrosion/irritation;**

Category 2

**(c) serious eye damage/irritation;**

Category 2

**(d) respiratory or skin sensitization;****Respiratory**

No data available

**Skin**

No data available

**(e) germ cell mutagenicity;**

No data available

**(f) carcinogenicity;**

No data available

There are no known carcinogenic chemicals in this product

**(g) reproductive toxicity;**

No data available

**(h) STOT-single exposure;**

Category 3

**Results / Target organs**

Respiratory system

**(i) STOT-repeated exposure;**

No data available

**Target Organs**

No information available.

**(j) aspiration hazard;**

No data available

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

**Symptoms / effects,both acute and delayed**

No information available

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## SECTION 12: Ecological information

**Ecotoxicity effects**

Do not empty into drains.

**Persistence and Degradability**

**Persistence**

Soluble in water, Persistence is unlikely, based on information available.

**Bioaccumulative Potential**

Bioaccumulation is unlikely

**Mobility in soil**

The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility Highly mobile in soils

### **Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

### **Persistent Organic Pollutant**

This product does not contain any known or suspected substance

### **Ozone Depletion Potential**

This product does not contain any known or suspected substance

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## SECTION 13: Disposal considerations

### **Waste from Residues/Unused Products**

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

### **Contaminated Packaging**

Dispose of this container to hazardous or special waste collection point.

### **Other Information**

Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.

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## SECTION 14: Transport information

### **Road and Rail Transport**

Not Regulated

### **IMDG/IMO**

Not regulated

### **IATA**

Not regulated

### **Special Precautions for User**

No special precautions required

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## SECTION 15: Regulatory information

### **International Inventories**

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan

(ISHL), Australia (AICS), Korea (KECL).

Component	The Inventory of Hazardous Chemicals (2015 Edition)	List of dangerous goods GB 12268 - 2012	TCSI	IECSC	EINECS	TSCADSL	PICCS	ENCS	ISHL	AICS	KECL
O-Benzylhydroxylamine	-	-	X	-	-	-	-	-	-	-	-

## National Regulations

## SECTION 16: Other information

### Prepared By

Health, Safety and Environmental Department

### Creation Date

16-Nov-2010

### Revision Date

16-Sep-2025

### Revision Summary

Not applicable.

### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

### Legend

#### CAS

Chemical Abstracts Service

#### TSCA

United States Toxic Substances Control Act Section 8(b)

Inventory

#### EINECS/ELINCS

European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

#### DSL/NDSL

Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS**

Philippines Inventory of Chemicals and Chemical Substances

**ENCS**

Japanese Existing and New Chemical Substances

**IECSC**

Chinese Inventory of Existing Chemical Substances

**AICS**

Australian Inventory of Chemical Substances

**KECL**

Korean Existing and Evaluated Chemical Substances

**NZIoC**

New Zealand Inventory of Chemicals

**WEL**

Workplace Exposure Limit

**TWA**

Time Weighted Average

**ACGIH**

American Conference of Governmental Industrial Hygienists

**IARC**

International Agency for Research on Cancer

**DNEL**

Derived No Effect Level

**PNEC**

Predicted No Effect Concentration

**RPE**

Respiratory Protective Equipment

**LD50**

Lethal Dose 50%

**LC50**

Lethal Concentration 50%

**EC50**

Effective Concentration 50%

**NOEC**

No Observed Effect Concentration

**POW**

Partition coefficient Octanol:Water

**PBT**

Persistent, Bioaccumulative, Toxic

**vPvB**

very Persistent, very Bioaccumulative

**ICAO/IATA**

International Civil Aviation Organization/International Air  
Transport Association

**IMO/IMDG**

International Maritime Organization/International Maritime

Dangerous Goods Code

**ADR**

European Agreement Concerning the International Carriage of

Dangerous Goods by Road

**MARPOL**

International Convention for the Prevention of Pollution from

Ships

**OECD**

Organisation for Economic Co-operation and Development

**ATE**

Acute Toxicity Estimate

**BCF**

Bioconcentration factor

**VOC**

(Volatile Organic Compound)

**Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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