

MATERIAL SAFETY DATA SHEETDate Updated: 26.04.2007
Version: 3.0**GLUTARALDEHYDE******** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ******

MSDS Name: Glutaraldehyde

Chemical Name: Glutaraldehyde solution in water

Company Identification: Dalian Onichem Co., Ltd.

218-220, No. 2 Gaoxin Street, Qixianling, Dalian 116023, P.R. China

Tel: 86-411-84794022, Fax: 86-411-84794077

For emergencies, call CHEMTREC 1-800-424-9300 or 1-202-483-7616

****** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ******

CAS#	Chemical Name	%
111-30-8	Glutaraldehyde	25-50 wt%
7732-18-5	water	50-75 wt%

****** SECTION 3 - HAZARDS IDENTIFICATION ********EMERGENCY OVERVIEW**

Irritating to eyes and skin. Limited evidence of a carcinogenic effect. May cause sensitization by skin contact. Harmful by inhalation.

POTENTIAL HEALTH EFFECTS

Eye: Causes eye irritation.

Skin: Causes skin irritation. Harmful if absorbed through the skin. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.

Inhalation: Harmful if inhaled. May cause respiratory tract irritation.

Chronic: Not available.

****** SECTION 4 - FIRST AID MEASURES ******

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid. Wash mouth out with water.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical aid.

****** SECTION 5 - FIRE FIGHTING MEASURES ******

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

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

****** SECTION 6 - ACCIDENTAL RELEASE MEASURES ******

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

****** SECTION 7 - HANDLING and STORAGE ******

Handling: Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage: Store in a tightly closed container. Store in a dry area. Store at around 20°C.

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****** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ******

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

PERSONAL PROTECTIVE EQUIPMENT

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

****** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ******

Physical State: Clear liquid

Appearance Transparent colourless liquid

Odor: Sharp fruity medicinal odor

Boiling Point/Melting Point: 100.5 deg C

Vapour Pressure: N/A

Specific Gravity: 1.10-1.13 at 20 deg C

Flash point : None, tag closed cup ASTM D 56, None, tag open cup ASTM D 1310

Flammability Limits: Not determined

Solubility in Water: 1000g/L

Molecular Formula: C5H8O2

Molecular Weight: 100.12

Other Properties: N/A

****** SECTION 10 - STABILITY AND REACTIVITY ******

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials: Strong oxidizing agents, strong bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

****** SECTION 11 - TOXICOLOGICAL INFORMATION ******

Draize test, rabbit, eye: 1 mg Severe;

Draize test, rabbit, eye: 250 ug/24H Severe;

Draize test, rabbit, skin: 2 mg/24H Severe;

Inhalation, rat: LC50 = 480 mg/m³/4H;

Oral, mouse: LD50 = 231 mg/kg;

Oral, rat: LD50 = 140 mg/kg;

Skin, rabbit: LD50 = 560 uL/kg;

Skin, rat: LD50 = >2500 mg/kg

****** SECTION 12 - ECOLOGICAL INFORMATION ******

No information available.

****** SECTION 13 - DISPOSAL CONSIDERATIONS ******

Dispose of in a manner consistent with federal, state, and local regulations.

****** SECTION 14 - TRANSPORT INFORMATION ******

For content of Glutaraldehyde less than 25%, the materials are not regulated by DOT, nor IMDG.

If over 25%, it is classified in China as

Hazard Class: 8

UN Number: 2922

Packing Group: III

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It also regarded as following class by others:

Hazard Class: 8
UN Number: 3265
Packing Group: II

****** SECTION 15 - REGULATORY INFORMATION ******

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 20: Harmful by inhalation.

R 36/38: Irritating to eyes and skin.

R 40: Limited evidence of a carcinogenic effect.

R 43: May cause sensitization by skin contact.

Safety Phrases:

S 36/37: Wear suitable protective clothing and gloves.

Canada

CAS# 111-30-8 is listed on Canada's DSL List.

CAS# 111-30-8 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 111-30-8 is listed on the TSCA inventory.

****** SECTION 16 - Additional INFORMATION ******

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.