

T-352 (Glutaraldehyde)

SECTION 1. IDENTIFICATION

Product Identifier	T-352 (Glutaraldehyde)
Other Means of Identification	Aqueous mixture of Glutaraldehyde
Product Family	Biocide
Recommended Use	Drilling Fluid Additive.
Supplier Identifier	Prairie Mud Service, 738 6 th Street, Estevan, SK S4A 1A4 306-634-3411

Emergency Phone No. 306-634-3411

SECTION 2. HAZARD IDENTIFICATION

Classification

Acute toxicity (Oral) - Category 1; Acute toxicity (Dermal) - Category 3; Acute toxicity (Inhalation) - Category 3; Serious eye damage - Category 1; Specific target organ toxicity (repeated exposure) - Category 1

Label Elements



Signal Word:

DANGER! EXTREMELY CORROSIVE!

Fatal if swallowed.

Toxic in contact with skin.

Causes serious eye damage.

Toxic if inhaled.

Causes damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

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

Wash hands and skin thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing.

Response:

IF SWALLOWED: Immediately call a POISON CENTRE or doctor.

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Continue rinsing.

Immediately call a POISON CENTRE or doctor.

Take off immediately all contaminated clothing and wash it before reuse.

Storage:

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

Store locked up.

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Disposal:
Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Glutaraldehyde solutions	000111-30-8	20-60	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen and get immediate medical attention.

Skin Contact

Immediately flush contaminated area with water for at least 20 minutes. If irritation persists, repeat flushing. If irritation develops or persists, seek medical attention.

Eye Contact

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes. Get medical attention. DO not transport until recommended flushing period is complete unless flushing can be continued during transport.

Ingestion

If conscious give 2 to 4 glasses of milk or water to drink but DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious or convulsing victim. If spontaneous vomiting occurs, keep the head below hips to prevent aspiration, rinse mouth and administer more milk or water. Mucosal injury following ingestion of this corrosive material may contraindicate the induction of vomiting in the treatment of possible intoxication. Similarly, if gastric lavage is performed, intubation should be done with great care. This product contains materials that may cause severe pneumonitis if aspirated.

Immediate Medical Attention and Special Treatment

Special Instructions

Immediate consultation with the local Poison Control Centre should be initiated. Severe and sometimes delayed (up to 72 hours) local and systemic reactions can occur. Due to the severely irritating nature of the material, swallowing may lead to ulceration and inflammation of the upper alimentary tract with hemorrhage and fluid loss. Also, perforation of the esophagus or stomach may occur, leading to mediastinitis or peritonitis and the resultant complications.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, carbon dioxide, foam, water fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Thermal decomposition products are toxic and may include oxides of carbon and irritating gases.

Special Protective Equipment and Precautions for Fire-fighters

Firefighters must wear a full-body encapsulating chemical protective suit with positive-pressure self-contained breathing apparatus (SCBA).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

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Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Use full protective equipment and breathing apparatus. Spills are best handled by absorbing product with inert material and placing in DOT-approved containers for disposal. Ventilate the area to prevent vapours from accumulating, especially in confined spaces. Do not allow wet spills to enter waterways. May cause a slip hazard.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid ingestion. Avoid skin and eye contact. Provide mechanical ventilation to minimize vapour concentration and to reduce potential for exposure. Practice reasonable caution and personal cleanliness. Containers exposed to heat may have pressure build-up; cool and vent containers before opening.

Handle in accordance with good industrial hygiene and safety practice.

Conditions for Safe Storage

Store in a cool, dry, well-ventilated place. Keep container tightly closed and away from incompatible materials such as organic chemicals, strong bases, metal powders, carbides, sulfides and any readily oxidizable material. Do not expose containers to temperatures above 40°C. Do not store with food or feed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. 0.05 mg/L (ceiling).

Appropriate Engineering Controls

Provide mechanical ventilation to minimize vapour concentrations and to reduce potential for exposure. Ventilate low lying areas where dense vapours may collect.

Individual Protection Measures

Eye/Face Protection

A NIOSH/MSHA-approved full facepiece respirator is recommended. Contact lenses should not be worn when working with this product.

Skin Protection

Impervious protective clothing and gloves (polyethylene, butyl rubber or nitrile rubber) are recommended.

Respiratory Protection

A NIOSH/MSHA-approved full facepiece air-purifying respirator equipped with acid gas, dust, mist, fume cartridges for concentrations up to 0.5 mg/L Glutaraldehyde or 1000 mg/L organic vapours is recommended.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Colourless. Particle Size: Not available
Odour	Pungent
Odour Threshold	0.04 ppm
pH	Not available
Melting Point/Freezing Point	-6 °C (melting); Not available (freezing)
Initial Boiling Point/Range	101 °C
Flash Point	Not applicable
Evaporation Rate	Not available
Vapour Pressure	0 kPa at 20 °C
Vapour Density (air = 1)	1.05
Relative Density (water = 1)	1.062 - 1.124
Solubility	Soluble in water; Soluble in all proportions in common organic solvents.

Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic)
Other Information	
Physical State	Liquid
Molecular Formula	Not available
Molecular Weight	Not available
Bulk Density	Not available
Surface Tension	Not available
Critical Temperature	Not available
Vapour Pressure at 50 deg C	Not available
Saturated Vapour Concentration	Not available

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Not applicable.

Incompatible Materials

Strong oxidizers, reducing agents, lewis or mineral acids, strong acids, strong alkalis, amines.

Hazardous Decomposition Products

Thermal decomposition products are toxic and may include oxides of carbon and irritating gases.

SECTION 11. TOXICOLOGICAL INFORMATION

This product causes severe irritancy, is corrosive and toxic. Symptoms may not appear until several hours after exposure and are aggravated by exertion.

May cause chemical pneumonitis, pulmonary edema, staining, skin sensitization or other allergic reactions. Shock, coma and death may occur.

Acute Toxicity

(glutaraldehyde solutions)

LC50 Inhalation Rat: 480 mg/kg

LD50 Oral Rat: 134 mg/kg

LD50 Dermal Rabbit: 560 mg/kg

Skin Corrosion/Irritation

CORROSIVE! Brief contact causes irritation pain. Burns (chemical) can occur if not promptly removed.

Toxic effects may be delayed. May cause staining.

Serious Eye Damage/Irritation

EXTREMELY CORROSIVE! May cause corneal scarring and clouding.

Glaucoma, cataracts and permanent blindness may occur.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

CORROSIVE! May cause severe irritation to the nose, throat and respiratory tract.

Airborne concentrations of mist or spray may cause damage to the lung tissue which could produce chemical pneumonia. Can cause injury to the entire respiratory tract.

Skin Absorption

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Corrosive! Prolonged or widespread skin contact may result in the absorption of potentially harmful amounts of material and/or dermatitis.

Ingestion

This substance is TOXIC if swallowed! Corrosive! Swallowing may lead to ulceration and inflammation of the upper alimentary tract with hemorrhage and fluid loss.

This product causes severe burning and pain in the mouth, throat and abdomen; severe scarring of the throat may occur. Vomiting, diarrhea and perforation of the esophagus and stomach lining may occur.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Repeated and/or prolonged exposure may cause productive cough, running nose, bronchopneumonia, pulmonary edema (fluid build-up in lungs) and reduction of pulmonary function.

Carcinogenicity

Not considered to be carcinogenic as IARC, NTP and OSHA.

Other Information

Not a known teratogen or mutagen.

No known reproductive toxicity / synergistic products.

No data available on embryotoxicity.

SECTION 12. ECOLOGICAL INFORMATION

No ecotoxicity or environmental fate data available. It is good practice to prevent releases into the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of in accordance with federal, provincial and local government regulations. Containers should NOT be re-used. Containers should be disposed of in accordance with government guidelines.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	3265	Corrosive liquid, acidic, organic, N.O.S. (contains glutaraldehyde)	8	III

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS 1988 Classification



Class D1B

Class D2B

Class E

D1B - Toxic; D2B - Toxic (Skin irritant; Eye irritant); E - Corrosive

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

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SECTION 16. OTHER INFORMATION

Phone No. (306-634-3411)

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Disclaimer This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.