

# INHIBOX

## SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	INHIBOX
<b>Other Means of Identification</b>	Neutralized Phosphate Ester
<b>Product Family</b>	Corrosion Inhibitor
<b>Recommended Use</b>	Drilling Fluid Additive.
<b>Supplier</b>	Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, <a href="http://www.brichemsupply.com">www.brichemsupply.com</a>
<b>Emergency Phone No.</b>	ChemTrec, (800) 424-9300, 24/7

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Acute toxicity (Oral) - Category 2; Acute toxicity (Inhalation) - Category 3; Skin corrosion/irritation - Category 2; Serious eye damage/eye irritation - Category 2A

### GHS Label Elements



Signal word: DANGER!  
VERY TOXIC if ingested, may cause death.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
1,2 Ethanediol	107-21-1	30-60	
Polyphosphoric acids, esters with triethanolamine, sodium salts	68131-72-6	10-30	
Sodium sulfite	7757-83-7	5-10	

## SECTION 4. FIRST-AID MEASURES

### First-aid Measures

#### Inhalation

Move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen. If breathing has stopped, trained personnel should begin artificial respiration (AR). If irritation develops or persists, seek medical attention.

#### Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Immediately wash gently and thoroughly with lukewarm, gently flowing water and non-abrasive soap for 15-20 minutes. If irritation develops or persists, seek medical attention.

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### **Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation develops or persists, seek medical attention.

### **Ingestion**

Have victim rinse mouth with water. Never give anything by mouth to an unconscious or convulsing victim. DO NOT INDUCE VOMITING. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Have victim rinse mouth with water again. Get medical attention.

### **Most Important Symptoms and Effects, Acute and Delayed**

If on skin:

May cause mild irritation.

If in eyes:

May cause moderate to severe irritation.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

#### **Unsuitable Extinguishing Media**

DO NOT use water jet.

### **Specific Hazards Arising from the Chemical**

Not normally a fire hazard.

### **Special Protective Equipment and Precautions for Fire-fighters**

Fight fire from a safe distance or a protected location.

A full-body encapsulating chemical protective suit with positive pressure SCBA may be necessary.

## **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. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Do not flush to drain.

### **Methods and Materials for Containment and Cleaning Up**

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. After cleaning, flush away traces with water, collect washing for disposal.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Prevent uncontrolled release of product. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system).

Do NOT eat, drink or store food in work areas. Do NOT smoke in work areas. Handle in accordance with good industrial hygiene and safety practice. It is good practice to: avoid breathing product, avoid eye and skin contact and wash hands thoroughly after handling.

### **Conditions for Safe Storage**

Store in an area that is: cool, temperature-controlled, well-ventilated, out of direct sunlight and away from heat and ignition sources. Do not store in unlabeled containers.

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

(1,2 Ethanediol).

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. STEL =

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Short-term Exposure Limit. 100 mg/m<sup>3</sup>

A4 = Not classifiable as a human carcinogen.

OSHA = US Occupational Safety and Health Administration. C = Ceiling limit. 50 ppm.

### Appropriate Engineering Controls

General ventilation is usually adequate. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles.

#### Skin Protection

Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e. shirt and pants, coveralls). Consideration should be given both to durability as well as permeation resistance. Chemically resistant gloves should be used.

#### Respiratory Protection

Not usually required when working with small quantities. Wear a NIOSH-approved air-purifying respirator with an organic vapour cartridge when airborne concentrations are excessive.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Blue - green liquid.
<b>Odour</b>	Sweet
<b>Odour Threshold</b>	Not available
<b>pH</b>	6 - 8
<b>Melting Point/Freezing Point</b>	-23 °C (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	> 93 °C (closed cup)
<b>Evaporation Rate</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not applicable
<b>Vapour Density (air = 1)</b>	Not applicable
<b>Relative Density (water = 1)</b>	1.284 at 25 °C
<b>Solubility</b>	Very soluble in water
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Other Information</b>	
<b>Physical State</b>	Liquid
<b>Molecular Formula</b>	Not available
<b>Molecular Weight</b>	Not available

## SECTION 10. STABILITY AND REACTIVITY

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None known.

### Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Incompatible materials.

### Incompatible Materials

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Strong oxidizing agents (e.g. perchloric acid), strong bases (e.g. sodium hydroxide), strong acids (e.g. hydrochloric acid).

#### **Hazardous Decomposition Products**

Oxides of carbon, nitrogen, sulfur.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Likely Routes of Exposure**

Skin contact; eye contact; inhalation; ingestion.

### **Acute Toxicity**

(1,2 Ethanediol)

LC50 Rat (4-hr. exposure): 2725 mg/m<sup>3</sup>

(sodium sulfite)

LC50 Rat (4-hr. exposure): > 5500 mg/m<sup>3</sup>

(1,2 Ethanediol)

LD50 Oral Female Rat: 4000 mg/m<sup>3</sup>

(sodium sulfite)

LD50 Oral: 3560 mg/m<sup>3</sup>

(1,2 Ethanediol)

LD50 Dermal Rabbit: 9530 mg/m<sup>3</sup>

### **Skin Corrosion/Irritation**

May cause mild irritation. Can cause redness, inflammation, swelling and irritation.

### **Serious Eye Damage/Irritation**

May cause moderate to severe irritation. Symptoms may include sore, red eyes and tearing.

### **STOT (Specific Target Organ Toxicity) - Single Exposure**

#### **Inhalation**

Mists may cause upper respiratory tract irritation. Inhalation of high concentrations may cause central nervous system effects such as nausea, headache, dizziness and unconsciousness.

#### **Ingestion**

Very toxic, can cause death.

Can irritate the mouth, throat and stomach.

Ingestion: There are 3 stages of effects which can overlap. Early symptoms can include upset stomach, slurred speech, clumsiness, drowsiness and convulsions. Second stage symptoms can include rapid heartbeat and breathing, bluish lips and skin, fluid in the lungs and heart failure. In the last stage, there can be kidney stones and kidney damage with lower back pain, increased then decreased urine production. There may be delayed nervous system effects such as paralysis of the face, clumsiness, impaired hearing and blurred vision. Death can occur at any stage.

### **STOT (Specific Target Organ Toxicity) - Repeated Exposure**

VERY TOXIC if ingested.

### **Carcinogenicity**

(1,2 Ethanediol)

ACGIH: A4 - not classified as a human carcinogen.

(sodium sulfite)

IRAC: Group 3 - not classifiable as to its carcinogenicity to humans.

### **Reproductive Toxicity**

#### **Development of Offspring**

1,2 Ethanediol (ethylene glycol) is very toxic; considered a developmental hazard based on animal evidence. In rats and mice, embryotoxic (late resorptions), fetotoxic (reduced fetal body weight) and teratogenic (external, soft tissue and skeletal defects) effects are observed at relatively high oral doses that caused no or minimal maternal toxicity. It is unlikely that humans could be exposed to high enough doses to cause developmental effects.

No information was located for: STOT (Specific Target Organ Toxicity) - Repeated Exposure, Respiratory and/or Skin Sensitization, Sexual Function and Fertility, Germ Cell Mutagenicity, Interactive Effects

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## SECTION 12. ECOLOGICAL INFORMATION

No ecotoxicity or environmental fate data available.

### Persistence and Degradability

No information was located.

### Bioaccumulative Potential

No information was located.

### Mobility in Soil

Studies are not available.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

## SECTION 14. TRANSPORT INFORMATION

**Special Precautions for User** Not applicable

### 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 Classification



Class D1B Class D2A; D2B

D1B - Toxic; D2A - Very Toxic (Teratogenicity/embryotoxicity); D2B - Toxic (Skin irritant; Eye irritant)

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.

#### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All intentional components of this product are either on the DSL, the confidential DSL or notifications / import restrictions are in place.

## SECTION 16. OTHER INFORMATION

**SDS Prepared By** Bri-Chem Supply Ltd

**Phone No.** (403) 252-5904

**Date of Preparation** February 05, 2016

#### 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

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obtained through the sales office whose address is at the top of this data sheet.