

**T-2001** 

# **SECTION 1. IDENTIFICATION**

Product Identifier	T-2001
Other Means of Identification	Mixture of aromatic, aliphatic hydrocarbons, amine compounds and organic acid
Product Family	Demulsifier
Recommended Use	Drilling Fluid Additive.
Supplier Identifier	Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, www.brichemsupply.com
Emergency Phone No.	ChemTrec, (800) 424-9300, 24/7

# **SECTION 2. HAZARD IDENTIFICATION**

#### Classification

Flammable liquid - Category 2; Physical Hazard Not Otherwise Classified (PHNOC) - Category 1; Acute toxicity (Oral) - Category 4; Acute toxicity (Dermal) - Category 4; Acute toxicity (Inhalation) - Category 3; Skin corrosion - Category 1A; Serious eye damage - Category 1; Carcinogenicity - Category 1B; Reproductive toxicity - Category 1; Specific target organ toxicity (single exposure) - Category 1; Specific target organ toxicity (repeated exposure) - Category 1; Aspiration hazard - Category 1; Health Hazard Not Otherwise Classified (HHNOC) - Category 1; Hazard Not Otherwise Classified (HNOC); Aquatic hazard (Acute) - Category 2; Aquatic hazard (Chronic) - Category 2

# Label Elements



Signal Word: Danger Hazard Statement(s): Highly flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters airways. Harmful in contact with skin. Causes severe skin burns and eye damage. Toxic if inhaled. Causes serious eye damage. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects. Precautionary Statement(s): Prevention: Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed.

Use explosion-proof electrical, ventilating, and lighting equipment.

Ground and bond container and receiving equipment.

Use non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dusts or mists.

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.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTRE or doctor.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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 contaminated clothing and wash it before reuse.

Collect spillage.

Storage:

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

Store locked up.

Disposal:

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

#### **Other Hazards**

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks maty ignite liquid and vapour. May cause flash fire or explosion.

27.96% of the mixture consists of component(s) of unknown acute oral toxicity. 29.06% of the mixture consists of component(s) of unknown acute dermal toxicity. 32.96% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 32.96% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Benzene, dimethyl	1330-20-7	51.3326		
Other components below reportable levels		19.157		
Distillates (petroleum), catalytic reformer fractionator residue, low-boiling	68477-31-6	8.8001		
Ethylbenzene	100-41-4	7.3141		
Methyl Alcohol	67-56-1	5.0005		
Butylamine	109-73-9	4.8018		
Naphthalene	91-20-3	1.31		
Toluene	108-88-3	1.184		
Sulfuric acid	7664-93-9	1.1		

#### Notes

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# **SECTION 4. FIRST-AID MEASURES**

#### **First-aid Measures**

#### Inhalation

Remove victim to fresh air and keep at rest in a position comfortabel for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory device. Call a Poison Centre or doctor.

#### **Skin Contact**

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

#### Eye Contact

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain immediate medical attention.

#### Ingestion

Immediately call a Poison Centre or doctor. Rinse mouth with water. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious or convulsing victim. If vomiting occurs naturally, keep the head below hips to prevent aspiration.

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

Aspiration may cause pulmonary oedema and pneumonitis. Burning pain and severe corrosive skin damage. Cuses serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects.

## **Immediate Medical Attention and Special Treatment**

#### **Special Instructions**

Provide general supportive measures and treat symptomatically. Thermal burns: flush with water immediately. While flushing, remove clothes which do not adhere to affected area.Call an ambulance. Continue flushing during transport to hospital. Chemical burns: flush with water immediately. While flushing remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keeop victim warm. Keep victim under observation. Symptoms may be delayed.

Take off all contaminated clothing immediately. If exposed or concerned: get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that mediacl personnel are aware of the material(s) involved, and take preacutions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

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

## **Extinguishing Media**

## Suitable Extinguishing Media

Water fog, foam, carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

## **Unsuitable Extinguishing Media**

Do not use water jet as an extinguisher, as this will spread fire.

#### **Specific Hazards Arising from the Product**

Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of igntion and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures.

This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

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

Move containers from fire area or cool with water spray. Vapours may form an explosive mixture in air. Vapours can travel to a source of ignition and flash back.

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Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards involved materials. Highly flammable liquid and vapour.

# 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. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be solvised if significant spillages cannot be contained.

## **Environmental Precautions**

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## Methods and Materials for Containment and Cleaning Up

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil,etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

# **SECTION 7. HANDLING AND STORAGE**

#### **Precautions for Safe Handling**

Respiratory protection is "only required" when sprays are present in the air.

#### **Conditions for Safe Storage**

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.

Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

US ACGIH Treshold Limit Values Benzene, dimethyl STEL: 150 ppm Butylamine TWA: 100 ppm; Ceiling: 5 ppm Ethylbenzene TWA: 20 ppm Methyl Alcohol STEL: 250 ppm; TWA: 200 ppm Naphthalene TWA: 10 ppm Sulfuric Acid TWA: 0.2 mg/m<sup>3</sup> Toluene TWA: 20 ppm Canada Alberta OELs Benzene, dimethyl STEL: 651 mg/m<sup>3</sup>; TWA: 150 ppm Butylamine Ceiling: 15 mg/m<sup>3</sup> Ethylbenzene STEL: 5 ppm, 543 mg/m<sup>3</sup>; TWA: 125 ppm, 434 mg/m<sup>3</sup>

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Methyl Alcohol STEL: 100 ppm, 328 mg/m<sup>3</sup>; TWA: 250 ppm, 262 mg/m<sup>3</sup> Naphthalene STEL: 200 ppm, 79 mg/m<sup>3</sup>; TWA: 15 ppm, 52 mg/m<sup>3</sup> Sulfuric Acid STEL: 10 ppm, 3 mg/m<sup>3</sup>; TWA: 1 mg/m<sup>3</sup> Toluene TWA: 50 ppm, 188 mg/m<sup>3</sup> ACGIH® = American Conference of Governmental Industrial Hygienists. TWA = Time-Weighted Average. STEL = Short-term Exposure Limit. OEL = Occupational Health and Safety Code.

# Appropriate Engineering Controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exahust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilites and emergency shower must be available when handling this product.

#### **Individual Protection Measures**

#### **Eye/Face Protection**

Chemical respirator with organic vapour cartridge and full facepiece.

#### **Skin Protection**

Wear chemical protective clothing e.g. gloves, aprons and boots. Wear chemical resistant safety gloves. Wear appropriate thermal protective clothing , when necessary.

#### **Respiratory Protection**

Chemical respirator with organic vapour cartridge and full facepiece.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Basic Physical and Chemical Properties**

Appearance	Dark red liquid.	
Odour	Aromatic	
рН	11.5	
Melting Point/Freezing Point	-35 °C (melting); Not available (freezing)	
Initial Boiling Point/Range	117.28 °C	
Flash Point	11.1 ⁰C	
Evaporation Rate	Not available	
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)	
Vapour Pressure	Not available	
Vapour Density (air = 1)	Not available	
Relative Density (water = 1)	0.93	
Solubility	Not available in water	
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available	
Auto-ignition Temperature	Not available	
Other Information		
Physical State	Liquid	
Molecular Formula	Not available	
Molecular Weight	Not available	
Saturated Vapour Concentration	Not available	
Other Physical Property 1	Percent volatile: 69.63% estimated	

# SECTION 10. STABILITY AND REACTIVITY

#### **Chemical Stability**

Normally stable.

#### **Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

#### **Conditions to Avoid**

High temperatures, open flames and all sources of ignition. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

#### Incompatible Materials

Strong acids. Strong oxidizing agents. Halogens.

#### **Hazardous Decomposition Products**

No hazardous decomposition products are known.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

#### Likely Routes of Exposure

Inhalation; skin contact; skin absorption; eye contact; ingestion.

#### **Acute Toxicity**

Methyl Alcohol

LC50 Inhalation Cat: 85.41 mg/l, 4.5 hours; Rat: 64000 ppm, 4 hours, 87.5 mg/l 6 hours

Benzene dimethyl

LD50 Oral Rat: 3523-8600 mg/kg

Ethylbenzene

LD50 Oral Rat: 35 mg/kg

Methyl Alcohol

# LD50 Oral Dog: 8000 mg/kg' Monkey: 2 g/kg, Mouse: 7300 mg/kg, Rabbit: 14.4 g/kg, Rat: 5628 mg/kg Naphthalene

LD50 Oral Rat: 490 mg/kg

Benzene Dimethyl LD50 Dermal Rabbit: 850 mg/kg Methyl Alcohol; LD50 Dermal Rabbit: 15800 mg/kg Naphthalene LD50 Dermal Rabbit: > 2g/kg

# Skin Corrosion/Irritation

Causes severe skin burns. Harmful in contact with skin.

## Serious Eye Damage/Irritation

Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

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

#### Inhalation

Toxic if inhaled. May cause damage to the organs by inhalation.

#### Ingestion

Causes digestive tract burns. Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. May be fatal if swallowed and enters airways.

## Aspiration Hazard

Aspiration may cause pulmonary oedema and pneumonitis.

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

May cause damage to organs through prolonged or repeated exposure by inhalation.

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#### **Respiratory and/or Skin Sensitization**

Not a respiratory sensitizer.

#### Carcinogenicity

May cause cancer. **ACGIH Carcinogens** Benzene, dimethyl: A4 Ethylbenzene: A3 Naphthalene: A3 Toluene: A4 Canada Alberta OELs Sulfuric Acid: Suspected human carcinogen IARC Monographs Benzene, dimethyl: 3 Ethylbenzene: 2B Naphthalene: 2B Toluene: 3 US NTP Naphthalene: Reasonably Anticipated to be a Human Carcinogen Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists. A3 = Animal carcinogen. A4 = Not classifiable as a human carcinogen. IARC = International Agency for Research on Cancer. Group 2B = Possibly carcinogenic to humans. Group 3 = Not classifiable as to its carcinogenicity to humans. NTP = National Toxicology Program.

# **Reproductive Toxicity**

# **Development of Offspring**

Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.

## **Sexual Function and Fertility**

May damage fertility or the unborn child.

# Germ Cell Mutagenicity

Not a known mutagen.

# **SECTION 12. ECOLOGICAL INFORMATION**

Toxic to aquatic life with long lasting effects.

## Ecotoxicity

Aquatic Benzene, dimethyl LC50 Fish ( Lepomis machrochirus): 7.711-9.591 mg/l, 96 hours Butylamine LC50 Fish (menidia beryllina): 24 mg/l, 96 hours EC50 Crustaces (Daphnia magna): > 100 mg/l, 48 hours Ethylbenzene LC50 Fish (Pimephales promelas): 7.5-11 mg/l, 96 hours EC50 Crustacea (Daphnia magna): 1.7-4.4 mg/l, 48 hour Methyl Alcohol LC50 Fish (Pimephales promelas): >100 mg/l, 96 hours EC50 Crustacea (Daphnia magna): >2100 mg/l, 96 hours
Naphthalene LC50 Fish (Oncorhyncus gorbuscha): 1.11-1.68 mg/l, 96 hours EC50 Crustacea (Daphnia magna): 1.09-3.4 mg/l, 48 hours

# Sulfuric Acid LC50 Fish (Platichthys flesus): 100-330 mg/j, 48 hours; Gambusia affinis: 42 mg/l, 24 hours EC50 Crustacea (Daphnia magna): 2 100 mg/l, 48 hours

# Persistence and Degradability

No data is available on the degradability of any ingredients in the mixture.

### **Bioaccumulative Potential**

Partition coefficient n-octanol / water (log Pow) Benzene, dimethyl: 3.12-3.2 Butylamine: 0.97 Ethylbenzene: 3.15 Methyl Alcohol: -0.77 Naphthalene: 3.3 Toluene: 2.73 **Mobility in Soil** 

No data available.

#### **Other Adverse Effects**

The product contains volatile organic compounds which have a photochemical ozone creation potential.

# 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.

Do not allow this material to drain into sewers/water supplies. Do not conatminate ponds, waterways or ditches with chemical or used containers.

# SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	UN3286	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (METHANOL, SULFURIC ACID)	3 (6.1, 8)	II
US DOT	UN1993	FLAMMABLE LIQUID, N.O.S.(ETHYLBENZENE RQ=13680 LBS, METHYL ALCOHOL RQ=100000 LBS), MARINE POLLUTANT (NAPHTHALENE)	3	II

**Special Precautions** Please note: Read safety instructions, SDS and emergency procedures before handling.

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

**Transport in Bulk** Not established.

# SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

## Canada

WHMIS 1988 Classification









Class B2

Class D1B

B2 - Flammable Liquid; D1B - Toxic; D2A - Very 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

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the SDS contains all of the information required by the Controlled Products Regulations.

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

Benzene, dimethyl: Listed Distillates (petroleum), catalytic reformer fractionator residue, low-boiling: Listed Ethylbenzene: Listed Methanol: Listed Butylamine: Listed Naphthalene: Listed Sulfuric Acid: Listed

#### USA

Toxic Substances Control Act (TSCA) Section 8(b)

Not regulated.

# Additional USA Regulatory Lists

CERCLA Hazardous Substance List Benzene, dimethyl: Listed Ethylbenzene: Listed Methanol: Listed Butylamine: Listed Naphthalene: Listed Sulfuric Acid: Listed Toluene: Listed

# **SECTION 16. OTHER INFORMATION**

SDS Prepared By	Bri-Chem Supply Ltd
Phone No.	(403) 252-5904
Date of Preparation	December 16, 2020
Date of Last Revision	December 03, 2018
Disclaimer	This Health and Safe date of its publication
	recult from its use M

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.

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