

Baker Hughes

Material Safety Data Sheet

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: CI-14 Item Number: 499779

Product Use: Corrosion inhibitor
Supplier: Baker Hughes
11211 FM 2920

Tomball, Texas 77375 (281)351-8131

IN CASE OF EMERGENCY CALL: (800) 424-9300 for

CHEMTREC (703) 527-3887 for International

HMIS HAZARD INDEX

HEALTH: 2
FLAMMABILITY: 3
REACTIVITY: 0
PERSONAL PROTECTION: h

2 COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component	CAS#	Percent	Hazard
Methanol	000067-56-1	60-100	Flammable toxic
Propargyl alcohol	000107-19-7	1-5	Toxic Sensitizer Reproductive Effects
Polyoxyalkylenes	NA	10-30	
Fatty acids	NA	5-10	
Olefin	NA	1-5	

3 HAZARDS IDENTIFICATION

PRIMARY ROUTES OF EXPOSURE: Inhalation. Ingestion. Eye contact. Skin contact. Skin absorption.

ACUTE OVEREXPOSURE EFFECTS:

INHALATION: Inhalation of solution vapor or mist may cause headache, nausea and/or respiratory tract irritation. May cause central nervous system depression. Exposure to high concentrations may cause central nervous system effects, which may include dizziness, headache and incoordination. Gross inhalation may cause heartbeat irregularities and unconsciousness.

INGESTION: HARMFUL OR FATAL IF SWALLOWED. May be fatal or cause blindness if swallowed. May cause central nervous system effects.

EYE CONTACT: May cause severe eye irritation. May cause permanent eye damage.

SKIN CONTACT: Harmful if absorbed through the skin. May cause severe skin irritation.

EXPOSURE LIMITS:

HAZARDOUS COMPONENT	ACGIH TLV	OSHA PEL	LC50 (inhalation)	LD50 (oral)
Methanol	200 ppm, skin	200 ppm TWA	64000 ppm/4 rat	5600 mg/kg rat
Propargyl alcohol	1 ppm, skin	NA	873 ppm/2 rat	20 mg/kg rat
Polyoxyalkylenes	NA	NA	NA	NA
Fatty acids	NA	NA	NA	NA
Olefin	NA	NA	NA	NA

4 FIRST AID MEASURES

INHALATION:

If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Only trained personnel should administer oxygen. Get medical attention.

INGESTION:

Rinse mouth with water several times. DO NOT induce vomiting. If vomiting occurs naturally, keep head lower than hips to prevent aspiration. Never give anything by mouth to an unconscious person. Obtain medical assistance immediately.

EYES:

In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately.

SKIN:

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.

5 FIRE FIGHTING MEASURES

FLASHPOINT (METHOD): 50-60.1°F (TCC)
LOWER EXPLOSION LIMIT (% v/v): Not available
UPPER EXPLOSION LIMIT (% v/v): Not available

SPECIAL HAZARDS:

Flammable. May form flammable/explosive vapor/air mixture. Vapor may be ignited by static discharge. EXTINGUISHING MEDIA:

Dry chemical. Carbon dioxide. Water spray. Foam.

SPECIAL FIREFIGHTING PROCEDURES:

Fire-fighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Cool exposed containers with water spray.

HAZARDOUS COMBUSTION PRODUCTS:

Oxides of carbon. Oxides of nitrogen. Oxides of sulfur.

6 ACCIDENTAL RELEASE MEASURES

Wear specified protective equipment. Remove sources of ignition. Small spills - Cover spill with absorbent material. Scoop absorbed material into a suitable container for disposal. Large spills - Dike to contain. Prevent from entering sewers or waterways. Recover product to suitable containers or vessel for reuse, if possible, or for disposal. Use only explosion proof transfer equipment.

7 HANDLING AND STORAGE

HANDLING:

Wear specified protective equipment. Use only in a well ventilated area. Use only spark-proof and explosion-proof tools and equipment. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Wash

hands before eating and smoking. Avoid contact with skin and eyes. Electrically ground/bond during pumping or transfer to avoid static accumulation/discharge.

STORAGE REQUIREMENTS:

Keep container in a well ventilated area. Keep away from incompatible materials. Keep away from heat. Keep away from ignition sources. Keep container closed when not in use.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

SPECIFIC ENGINEERING CONTROLS:

Use only in a well ventilated area. Local exhaust. Adequate ventilation should be provided to keep concentrations below acceptable exposure limits. Use only explosion proof ventilation equipment.

PERSONAL PROTECTIVE EQUIPMENT:

Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure. Cartridge respirator. Neoprene gloves. PVC or Viton gloves. Chemical resistant googles or face shield. Coveralls.

9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
COLOR: Amber
ODOR: Sweet
ODOR THRESHOLD: Not available

SPECIFIC GRAVITY: 0.87

VAPOR PRESSURE: 12.5 kPa @21.1 C

VAPOR DENSITY (air = 1): EVAPORATION RATE:

Not available Not available

BOILING POINT: Not available FREEZING POINT: < -30°C pH: 3.3 (5% sol.)

SOLUBILITY IN WATER: Dispersible

10 STABILITY AND REACTIVITY

STABILITY:

Stable under normal conditions of use.

INCOMPATIBILITY/CONDITIONS OF REACTIVITY:

Strong oxidizers. Strong reducing agents.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS:

None known.

HAZARDOUS POLYMERIZATION:

Will not occur.

11 TOXICOLOGICAL PROPERTIES

CHRONIC EFFECTS:

Liver and kidney damage. Optic nerve damage. Dermatitis. Central nervous system damage. Eye damage. Respiratory ailments.

SENSITIZATION:

Not known.

CARCINOGENICITY:

None of the components of this product have been listed as carcinogenic by IARC, NTP or OSHA. (IARC-International Agency for Research on Cancer) (NTP - National Toxicology Program) (OSHA - Occupational Safety & Health Administration (US))

MUTAGENICITY:

Not known.

REPRODUCTIVE TOXICITY:

This product contains methanol (%) which has been reported to cause fetotoxicity and teratogenicity in rats and mice when they were exposed by inhalation to high concentrations that did not produce significant maternal toxicity.

12 ECOLOGICAL INFORMATION

No specific information available

13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Consult local waste authorities for direction and/or approvals prior to disposal.

14 TRANSPORT INFORMATION

LAND TRANSPORT (DOT)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. Technical Name(s): Methanol, Propargyl alcohol

UN/ID No.: UN 1993

Hazard Class - Primary: 3 Hazard Class - Secondary: Packing Group: Ш

Reportable Quantity (RQ):

Emergency Response Guide #: 128

AIR TRANSPORT (ICAO/IATA)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. Technical Name(s): Methanol, Propargyl alcohol

UN/ID No.: UN 1993

Hazard Class - Primary: Hazard Class - Secondary:

Packing Group: Ш

MARINE TRANSPORT (IMDG/IMO)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. Technical Name(s): Methanol, Propargyl alcohol

UN No.: UN 1993

Hazard Class - Primary: 3

Hazard Class - Secondary: Packing Group:

EmS: F-E, <u>S-E</u>

15 REGULATORY INFORMATION

SARA TITLE III:

SECTION 302/304 This product does not contain substances listed in Appendix A and B as an Extremely

Hazardous Substance.

SECTION 311/312 Delayed, Fire, Immediate

This product contains the following substance(s) which appear on the List of Toxic SECTION 313

Chemicals:, Methanol CAS # 67-56-1, Propargyl alcohol CAS# 107-19-7

TSCA INVENTORY: The substances in this product are included on or exempted from the TSCA 8(b) Inventory

(40 CFR 710).

CALIFORNIA PROP 65: None of the chemicals on the current Proposition 65 list are

known to be present in this product.

PRIORITY POLLUTANTS:

16 OTHER INFORMATION

ISSUE DATE: 05/20/2010

PREPARED BY: Baker Hughes HSE Department

REFERENCES:

Suppliers' Literature.

CCINFO Web Information Service, Canadian Centre for Occupational Health and Safety, 2006.

Dangerous Goods Regulations, 47th ed., International Air Transport Association, 2006.

Restructured ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road, United Nations, New York and Geneva, 2001. Vols. I, II.

International Marine Dangerous Goods Code, 2002 Edition, International Maritime Organisation, 2002.

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002, Statutory Instruments 2002 No. 1689, UK.

EH40/2005 Workplace exposure limits, Health and Safety Executive, Norwich, 2005.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.