

MATERIAL SAFETY DATA SHEET

(USA)

(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

Version: 4

Revision date: 21 January 2011

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Code: B315
Product Name: Friction Reducer B315
Company Identification: Schlumberger Technology Corporation
110 Schlumberger Drive
Sugar Land, Texas 77478, USA
Telephone: 1-281-285-7873
Emergency Telephone Number: USA: +1-281-595-3518 (24hr)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Main physical hazards: No classified physical hazards.
Main health hazards: May be mildly irritating to eyes. May be mildly irritating if inhaled.
Other Information: Slick when wet.
Precautions: DO NOT FREEZE. Keep away from heat, sparks, and flame.
HMIS classification: Health: 1 Flammability: 1 Physical hazard: 0

Form: Liquid

Color: Off-white

Odor: Hydrocarbons

Principle routes of exposure:

Eye contact. Skin contact. Inhalation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %- Range
Distillates (petroleum), hydrotreated light	64742-47-8	10 - 30
Aliphatic alcohol glycol ether	Proprietary	0.5-1.5

4. FIRST AID MEASURES

Eye contact: Rinse immediately with plenty of water, also under the eyelids. Seek medical attention if irritation occurs.
Skin contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Seek medical attention if irritation occurs.
Ingestion: DO NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.
Inhalation: Move to fresh air. Consult a physician if necessary.

5. FIRE-FIGHTING MEASURES

Fire hazard: Combustible material.
Flash point: >100 °C / 212 °F
Autoignition temperature: No data available.
Flammability limits in air:
Lower: None
Upper: None
Oxidizing properties: None.

Suitable extinguishing media:
Alcohol Foam, CO2, Dry Chemical.

Extinguishing media which must not be used for safety reasons:
None known.

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:
When heated strongly or burned, oxides of carbon, nitrogen oxides, ammonia and harmful organic chemical fumes are released.

Special protective equipment for firefighters:
Wear protective fire fighting clothing and avoid breathing vapors. Use self-contained breathing apparatus in closed areas.

NFPA rating:
Health: 2
Flammability: 1
Instability: 0
Special: None

6. ACCIDENTAL RELEASE MEASURES

Main physical hazards: No classified physical hazards.
Other Information: Slick when wet.
Personal precautions: Wear suitable protective equipment.
Methods for cleaning up: Dam up. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
Environmental precautions: Keep out of waterways. Prevent entry into sewage.

7. HANDLING AND STORAGE

Handling:
Precautions: DO NOT FREEZE. Keep away from heat, sparks, and flame.
Safe handling advice: Avoid contact with skin and eyes.
Technical measures/ storage conditions: Store in well ventilated area out of direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.
Packaging requirements: Coated (epoxy phenolic) steel drum.
Incompatible products: Oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:	Control the source:.. Ensure adequate ventilation.
Hygiene measures:	Keep airborne concentrations below exposure limits. Avoid contact with eyes.
Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment. Use NIOSH approved respirator with organic vapor/acid gas protection (color coded yellow).
Eye protection:	Tightly fitting safety goggles.
Hand protection:	Impervious gloves. PVC.
Skin and body protection:	Chemical resistant apron.

Occupational Exposure Limits

Component	ACGIH - TLVs			OSHA - PELs		
	TWA / C	STEL	Skin	TWA / C	STEL	Final PELs - Skin
Distillates (petroleum), hydrotreated light	200 mg/m ³ TWA	-	Skin Notation	-	-	-
Aliphatic alcohol glycol ether	-	-	-	-	-	-

Particles Not Otherwise Regulated/Specified [PNOR or PNOs] (insoluble or poorly soluble):

- OSHA PEL's for Inert or Nuisance Dust are covered by PNOR limits: respirable fraction: 5 mg/m³; total dust 15 mg/m³.
- ACGIH PNOs Recommendations: airborne concentrations should be kept below 3 mg/m³, respirable particulate, and 10 mg/m³, inhalable particles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical characterization:	Emulsion of petroleum distillate and aqueous solution.
Fire hazard:	Combustible material.
Form:	Liquid
Color:	Off-white
Odor:	Hydrocarbons
Odor threshold:	None.
pH:	8
Boiling point/range:	No data available.
Flash point:	>100 °C / 212 °F
Flammability limits in air:	
Lower:	None
Upper:	None
Bulk density:	Not applicable.
Melting point/range:	< -20 °C / -4 °F
Decomposition temperature:	No data available.
Solubility:	
Water solubility:	Gels on contact with water. Dispersible.
Fat solubility:	No information available.
Partition coefficient (n-octanol/water):	No information available.
Relative density:	~ 1.03 (@ 25°C)
Vapor pressure:	No data available.
Vapor density:	No data available.
Viscosity:	400-1200 kPa.s (@ 25 °C)
Evaporation rate:	No data available.
% Volatile (VOC):	No data available.

10. STABILITY AND REACTIVITY**Stability:**

Stable under recommended storage conditions.

Conditions to avoid:

Freezing.

Incompatibility with other substances:

Oxidizers.

Hazardous decomposition products:

When heated strongly or burned, oxides of carbon, nitrogen oxides, ammonia and harmful organic chemical fumes are released.

Hazardous polymerization:

Hazardous polymerization does not occur.

Other Information:

Slick when wet.

11. TOXICOLOGICAL INFORMATION**PRODUCT TOXICOLOGICAL INFORMATION**

No toxicology studies have been conducted on this product. Hazard classification is estimated based on available component information.

Acute Health Hazard**Eye contact:**

May be mildly irritating.

Skin contact:

May be mildly irritating. Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion:

Swallowing large amounts may be harmful.

Inhalation:

May be mildly irritating if inhaled.

Sensitization - lung:

Not known to cause allergic reaction.

Sensitization - skin:

Not known to cause allergic reaction.

Chronic Health Hazard**Carcinogenic effects:**

None known.

Mutagenic effects:

None known.

Teratogenic effects:

None known.

Reproductive toxicity:

None known.

Target organ effects:

No information available.

COMPONENT TOXICOLOGICAL INFORMATION

Component	Target Organ Effects	LD50 / LC50
Distillates (petroleum), hydrotreated light	-	> 5.2 mg/L (Inhalation LC50; Rat) 4 h > 5000 mg/kg (Oral LD50; Rat) > 2000 mg/kg (Dermal LD50; Rabbit)
Aliphatic alcohol glycol ether	-	-

Component	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA Listed Carcinogens	NTP
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Distillates (petroleum), hydrotreated light	-	-	-	-
Aliphatic alcohol glycol ether	-	-	-	-

12. ECOLOGICAL INFORMATION

PRODUCT INFORMATION

COMPONENT INFORMATION

Distillates (petroleum), hydrotreated light

Bioaccumulation: log Pow = 11-12.5
Persistence / degradability: Biodegradable.
Fish toxicity: 96h LC50= >1000 mg/l (Scophthalmus maximus juvenile)
Freshwater Fish Species Data LC50 96 h (Pimephales promelas) = 45 mg/L
 LC50 96 h (Lepomis macrochirus) = 1740 mg/L
Water Flea Data LC50 96 h (Daphnia magna) = 4720 mg/L

Aliphatic alcohol glycol ether

Bioaccumulation: No information available
Persistence / degradability: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
 Dispose of in accordance with local regulations.

Contaminated packaging:
 Dispose of in accordance with local regulations. If reusable containers are used, send them back to the product supplier, after the required rinsing.

EPA RCRA Hazardous Waste Code:
 None

14. TRANSPORT INFORMATION

DOT:
CERCLA RQ: None
Hazard class: Not regulated.
Proper shipping name: Not regulated
Label(s): None required.

IMDG/IMO
Shipping name: Not regulated.
UN number: None

ICAO/IATA

Shipping name: Not regulated.

UN number: None

TDG (Canada):

Shipping name: Not regulated.

PIN: None

Note 1:

For the applicable placard selection refer to the appropriate transport regulations; the selection may vary depending on the cargo size and categories of other hazardous materials in the cargo.

15. REGULATORY INFORMATION

International Chemical Inventories

USA, Toxic Substances Control Act inventory (TSCA): This product complies with TSCA requirements.

IMPORTS, USA: No import volume restrictions.

Canada, Domestic Substance List (DSL): This product complies with DSL requirements.

IMPORTS, Canada: No import volume restrictions.

U.S.A. Regulations

OSHA Hazard Communication Standard:

(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

EPA RCRA Hazardous Waste Code:

None

EPA, Sections 311 and 312 - Material Safety Data Sheet Requirements (40 CFR 370):

Immediate (Acute) Health Hazard:	None
Delayed (Chronic) Health Hazard:	None
Fire Hazard:	None
Sudden Release or Pressure Hazard:	None
Reactive Hazard:	None

EPA, Sections 313 - List of Toxic Chemicals (40 CFR 372):

This product contains the following substance(s), which appear(s) on the List of Toxic Chemicals:

Additional Regulatory Information

Distillates (petroleum), hydrotreated light

EPA, CERCLA Section 102a/103 Hazardous Substances (40 CFR 302.4): None

CERCLA/SARA - Hazardous Substances and their RQs: None

EPA, SARA TITLE III Section 304, Extremely Hazardous Substances (40 CFR 355.40): None

California Proposition 65: None

Aliphatic alcohol glycol ether

EPA, CERCLA Section 102a/103 Hazardous Substances (40 CFR 302.4): None

CERCLA/SARA - Hazardous Substances and their RQs: None

EPA, SARA TITLE III Section 304, Extremely Hazardous Substances (40 CFR 355.40): None

California Proposition 65: None

International Hazard Class

WHMIS Hazard Class:
Non-controlled product.

16. OTHER INFORMATION

Current references:

1. Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices. *American Conference of Governmental Industrial Hygienists, Cincinnati OH.*
2. IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. *World Health Organization, International Agency for Research on Cancer. Geneva, Switzerland.*
3. Annual Report on Carcinogens. National Toxicology Program. *U.S. Department of Health and Human Services, Public Health Service.*
4. NIOSH Registry of Toxic Effects of Chemical Substances (RTECS). *National Institute for Occupational safety and Health. Cincinnati, OH.*
5. LOLI Database.

Explanation of terms:

ACGIH:	American Conference of Governmental Industrial Hygienist
ACGIH-TL:	Threshold Limit Value
DSL:	Domestic Substance List
HMIRC:	Hazardous Materials Information Review Commission
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
NIOSH:	National Institute of Occupational Safety & Health
NIOSH-REL:	Recommended Exposure Limit
OSHA:	Occupational Safety & Health Administration
OSHA-PEL:	Permissible Exposure Limit
TSCA:	Toxic Substance Control Act (Inventory)

Occupational Exposure Limits indicators: TWA - Time Weighted Average; STEL - Short Term Limit; C - Ceiling Limit; units: [mg/m³]

ACGIH Notations:

"Skin" refers to the potential significant contribution to the overall exposure by the cutaneous route, including mucous membranes and the eyes, either by contact with vapors or by direct skin contact with the substance.

"A" notation indicates carcinogenicity as follows:

ACGIH classification: A1 - Confirmed Human Carcinogen; A2 - Suspected Human Carcinogen; A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; A4 - Not Classifiable as a Human Carcinogen; A5 - Not suspected as a Human Carcinogen.

"SEN" refers to the potential for an agent to product sensitization as confirmed by human and animal data.

Section(s) revised: MSDS fully updated.

Prepared by: Chemical Regulatory Compliance (CRC)

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End of the Material Safety Data Sheet