

1. Identification

PRODUCT NAME: EFFECTIVE DATE: CHEMICAL FAMILY: FORMULA:

EZE-SLIDE[™]

August 1, 2018 Drilling Fluid/Coil Tubing Fluid Additive Proprietary

MANUFACTURER: SUN DRILLING PRODUCTS CORP. d/b/a SUN SPECIALTY PRODUCTS 503 Main Street Belle Chasse, LA 70037

CANADIAN IMPORTER :

SUN DRILLING PRODUCTS CORP. d/b/a SUN SPECIALTY PRODUCTS #102 6660 Taylor Drive Red Deer, AB TYP IY3 (403) 341-5046 (for 24-hr Emergency call Chemtrec)

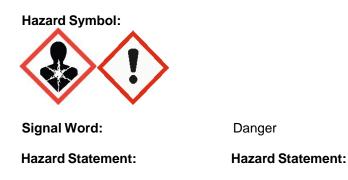
CHEMICAL EMERGENCY – Spill, Leak, Fire, Accident USA/Canada Call 1-800 424-9300 CHEMTREC

2. Hazard(s) Identification

Hazard Classification

Health Hazards		
Aspiration Hazard	Category 1	
Skin sensitizer	Category 1B	
Unknown toxicity		
Acute toxicity, oral		0.0 %
Acute toxicity, dermal		0.0 %
Acute toxicity, inhalation, vapor		27.8 %
Acute toxicity, inhalation, dust or mist		92.5 %

Label Elements:





May be fatal if swallowed and enters airways. May cause an allergic skin reaction.

Precautionary Statement:

Prevention:	Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs, get medical advice/attention. Remove contaminated clothing and wash it before reuse. IF SWALLOWED: Immediately call a POISON CENTER/DOCTOR. Do NOT induce vomiting.
Storage:	Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do	
not result in GHS classification:	None identified.

3. Composition/information on ingredients

Chemical name	CAS number	Percent by Weight
Alkanes, C10-24 branched and linear	172343-37-2	50-60%
Amides, from Diethylenetriamine, alkenoic acid and tall-oil fatty acids	Not determined	20-30%
Butyl cellosolve	111-76-2	2-8 %

4. First-aid measures

Ingestion:	Do NOT induce vomiting. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. If vomiting occurs naturally, the employee should lean forward to reduce the risk of aspiration. Rinse mouth. Immediately call a POISON CENTER/physician.
Inhalation:	Remove exposed person to fresh air if adverse effects are observed.
Skin Contact:	Take off contaminated clothing and wash before re- use. Wash skin thoroughly with soap and water. If skin irritation or rash occurs: Get medical attention. Launder contaminated clothing before reuse.



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Eye contact:	Flush thoroughly with water. If irritation occurs, get medical assistance.	
	Remove contact lenses, if present and easy to do. Continue rinsing.	
Most important symptoms/effe	cts, acute and delayed	
Symptoms:	See section 11.	
Indication of immediate medica	al attention and special treatment needed	
Treatment	Treat symptomatically.	
5. Fire-fighting measures		
General Fire Hazards:	No unusual fire or explosion hazards noted.	
Suitable extinguishing media:	CO2, Dry chemical or Foam. Water can be used to cool and protect exposed material.	
Unsuitable extinguishing	ing Do not use water jet as an extinguisher, as this will spread the fire.	
media:		
Specific hazards arising from the chemical:		
Special protective equipment and Special fire fighting procedures:	precautions for firefighters No data available.	
Special protective equipment for fire-fighters:	Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots.	
6. Accidental release measures		
Personal precautions,	No data available.	
protective equipment and emergency procedures:		
Methods and material for containment and cleaning up:	Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.	
Environmental Precautions:	Avoid release to the environment. Do not contaminate water	

sources or sewer. Prevent further leakage or spillage if safe to do



7. Handling and storage

Precautions for safe handling:	Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and grounding connection when transferring material. In case of spills, beware of slippery floors and surfaces.
	Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Avoid contact with skin. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse.
Maximum Handling	Not determined.
Temperature:	
Conditions for safe storage, including any incompatibilities: Maximum Storage Temperature:	Store away from incompatible materials. See section 10 for incompatible materials. Not determined.

8. Exposure controls/personal protection

Control Parameters:

Occupational Exposure Limits

Chemical name	Туре	Exposure Limit Values	Source
Butyl Cellosolve	TWA	20 ppm	U.S. ACGIH Threshold Limit Values (02 2012)
Butyl Cellosolve	REL	5 ppm 24 mg/	m ³ U.S. NIOSH Pocket Guide to Chemical Hazards
Butyl Cellosolve	PEL	50 ppm 240 mg	/m ³ U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Biological Limit Values

Chemical name	Exposure Limit Values	Source
Butyl cellosolve (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.)	200 mg/g (Creatinine in urine)	ACGIH BEI (03 2013)

Appropriate engineering controls:

No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

General information:

Provide easy access to water supply and eye wash facilities. 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 exhaust 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/face protection:Wear safety glasses with sideshields or tight-fitting goggles to
prevent eye contact.Skin Protection
Hand Protection:Use nitrile or neoprene gloves. Use good industrial hygiene
practices. In case of skin contact, wash hands and arms
with soap and water
 - Other: Wear apron or protective clothing in case of contact. Do not wear rings, watches or similar apparel that could entrap the material. Chemical resistant boots.
 - **Respiratory Protection:** A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions, require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. Use respirator with a combination organic vapor and dust/mist cartridge.
 - **Hygiene measures:** Observe good industrial hygiene practices. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse.

9. Physical and chemical properties

Appearance		
Physical state:	Liquid	
Form:	Liquid	
Color:	Light colored	
Odor:	Characteristic	
Odor threshold:	No data available.	
pH:	No data available.	
Freezing point:	No data available.	
Boiling Point:	No data available.	
Flash Point:	> 212 °F (100 °C) (Test method unavailable)	
Evaporation rate:	No data available.	
Flammability (solid, gas):	No data available.	
Upper/lower limit on flammability or explosive limits		
Flammability limit - upper (%):	No data available.	
Flammability limit - lower (%):	No data available.	
Explosive limit - upper (%):	No data available.	



Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	0.91 - 0.94 79.9 °F (26.6 °C)
Solubility(ies)	
Solubility in water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity	
Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Will not occur.
Conditions to avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials.
Incompatible Materials: Hazardous Decomposition	Strong oxidizing agents. Alkalies.
Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, nitrogen oxides, and other products of incomplete combustion.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	Causes mild skin irritation.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity

Oral

Product:

Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain. Ingestion can cause central nervous system effects such as headache,



	dizziness, drowsiness, and generalized weakness. Ingestion may cause red blood cell hemolysis and possible liver and kidney injury. A cute T oxicity E stimate of the Mix ture ATEmix > 10,000 mg/kg.		
Dermal			
Product:	ATEmix > 5,000 mg/kg		
Inhalation			
Product:	ATEmix (4 h): > 20 mg/l. Vapor High concentrations may cause headaches, drowsiness and stupor, dizziness, weakness, irritability and other behavioral changes, nausea, and vomiting.		
Skin Corrosion/Irritation:			
Product:	Causes mild skin irritation. Remarks: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.		
Serious Eye Damage			
/Eye Irritation:			
Product:	Remarks: Not classified as a primary eye irritant.		
Respiratory sensitization:	No data available.		
Skin sensitization:	Skin Sensitizer (Amides, from Diethylenetriamine, alkenoic acid and tall-oil fatty acids)		
Specific Target Organ Toxic Product:	Sity - Single Exposure: If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.		
Butyl cellosolve	Nose, throat and lung irritant.		
-			
Aspiration Hazard:			
Product	Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death.		
Other effects:			
Butyl cellosolve	Central nervous system		
2			
Chronic Effects Carcinogen	icity:		
Product:	Not available.		
Butyl cellosolve	A National Toxicology Program (NTP) chronic inhalation study revealed some evidence of carcinogenic activity in male and female mice, equivocal evidence in female rats and no evidence in male rats.		

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified



US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity:

Butyl cellosolve	This material has not exhibited mutagenic or genotoxic potential in laboratory tests.
Reproductive toxicity:	
Butyl cellosolve	Based on available data this product is not expected to be classified as a reproductive hazard. Butyl cellosolve causes fetotoxicity in lab animals at doses which are maternally toxic.

Specific Target Organ Toxicity - Repeated Exposure:

Butyl cellosolve	Repeated overexposure may result in liver and kidney damage. Dermal: Target Organ(s): Blood Inhalation: Target Organ(s): Blood Oral: Target Organ(s): Blood
	Oral. Target Organ(3). Diood

12. Ecological information

Ecotoxicity Fish Amides, from Diethylenetriamine, alkenoic acid and tall-oil fatty acids	LC 50 (Zebra Fish, 4 Days): > 100 mg/l
Butyl cellosolve	LC 50 (Bluegill Sunfish, 4 d): 1,490 mg/l LC 50 (Rainbow Trout, 4 d): 1,471 mg/l LC 50 (Zebra Fish, 21 d):> 100 mg/l NOEC (Zebra Fish, 21 d): > 100 mg/l
Aquatic Invertebrates Butyl cellosolve	EC 50 (Water flea (Daphnia magna), 2 d): 1,550 mg/l EC 50 (Water flea (Daphnia magna), 21 d): 297 mg/l NOEC (Water flea (Daphnia magna), 21 d): 100 mg/l
Toxicity to Aquatic Plants	NOLO (Water nea (Daprina magna), 21 d). 100 mg/r
Butyl cellosolve	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 9 mg/l EC 50 (Green algae (Selenastrum capricornutum), 7 d): >1,000 mg/l NOEC (Green algae (Selenastrum capricornutum), 3 d): 88 mg/l
Toxicity to soil dwelling organisms	No data available
Sediment Toxicity	No data available



Toxicity to Terrestrial Plants	No data available		
Toxicity to Above-Ground Organisms	No data available		
Toxicity to microorganisms Butyl cellosolve	EC 50 (Sludge, 0.1 d): > 1,000 mg/l		
Persistence and Degradability Biodegrada	tion		
Amides, from Diethylenetriamine, alkenoic acid and tall-oil fatty acids	OECD TG 301 D, 2.7 %, 28 d, Not readily degradable		
Butyl cellosolve	OECD TG 302 B, 100 %, 28 d, Readily biodegradable		
	OECD TG 301 E, 95 %, 28 d, Readily biodegradable		
	OECD TG 301 B, 90.4 %, 28 d, Readily biodegradable		
Bioaccumulative Potential			
Bioconcentration Factor (BCF)	No data available		
Partition Coefficient n-octanol / water (log Kow)			
Butyl cellosolve Mobility: No data available	Log Kow: 0.81 (Measured)		
Other Adverse Effects:	No data available.		
13. Disposal considerations			

Disposal instructions:	Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.
Contaminated Packaging:	Container packaging may exhibit hazards.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

ΙΑΤΑ

Not regulated.



Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

The DOT shipping information in this section is based on a bulk container. Please review the accompanying shipping papers for the correct shipping descriptions based the size of the package. Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. During transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4) None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986

(SARA) SARA 311 Classifications

Immediate (Acute) Health Hazards SARA 302 Extremely Hazardous Substance None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	CAS number	<u>Percent by</u> Weight	Reportable quantity
Butyl cellosolve	111-76-2	2.2 %	*See regulation for further details

*These specific chemicals are not listed please check the generic entries on the SARA 304 listings for applicability.

SARA 313 (TRI Reporting)

Chomical Identity	CAS number	Percent by	Reporting threshold for other uses	Reporting threshold for manufacturing and processing
Chemical Identity	CAS number	Weight	other uses	and processing
Butyl cellosolve	111-76-2	2.2 %	10000 lbs	25000 lbs

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

Inventory Status

Australia (AICS)

May require notification before sale under Australian regulations.

Canada (DSL/NDSL)

This product meets the definition of an article under the Canadian Environmental Protection Act.



China (IECSC) This product may require notification in China. European Union (REACH) This product is not registered under REACH. Japan (ENCS) May require notification in Japan. Korea (ECL) May require notification before sale in Korea. New Zealand (NZIoC) May require notification before sale under New Zealand regulations. Philippines (PICCS) May require notification before sale under Philippines Republic Act 6969. Switzerland (SWISS) May require notification before sale in Switzerland. Taiwan (TCSCA) May require notification before sale in Taiwan. United States (TSCA) All components of this material are on the US TSCA Inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

TOXIC SUBSTANCES CONTROL ACT TSCA)

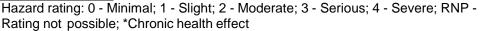
All components of this material are on the US TSCA Inventory.

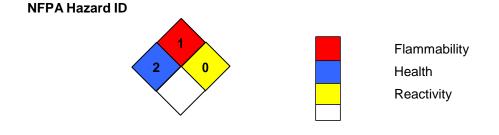
16. Other information

REVISION DATE: August 1, 2018.

HMIS Hazard ID









Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Source of information:Internal company data and other publically available resources.Further Information:Contact supplier (see Section 1)

FOOT NOTES: N/A NOT APPLICABLE	ND – NO DATA AVAILABLE
> = GREATER THAN	< = LESS THAN

REVISION STATEMENT: Changes have been made throughout this Safety Data Sheet. Please read the entire document.

DISCLAIMER:

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