



SECTION 1 – IDENTIFICATION

PRODUCT NAME:	SUN BURST DP®
EFFECTIVE DATE:	August 1, 2018
CHEMICAL FAMILY:	Drilling Fluid Additive
USAGE:	Friction Reducer
SUPPLIER INFORMATION:	Prairie Mud Service 738 6th Street Estevan, SK S4A 1A4 (306) 634-3411 https://www.prairiemud.ca

- **24HR EMERGENCY CONTACT**
- **CANUTEC - (613) 996-6666 or *666 on cellular phone**

SECTION 2 – HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture:

This substance is classified as hazardous as a combustible dust by the United States 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Hazardous Products Regulation (HPR) 2015. The signal word, hazard statement and precautionary statements in the United States and Canada are:

2.2 Label Elements

Classification: Combustible Dust HPR Category 1(a)

Signal Word: Warning

Hazard Statement: May form combustible dust concentrations in air.

Precautionary Statements: Keep away from all ignition sources including heat, sparks and flame. No smoking. Prevent dust accumulations to minimize explosion hazard.

GHS Classification: Not a hazardous substance according to Regulation (EC) 1272/2008 (CLP), its various amendments and adaptations and Directive 67/548/EEC.



SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NUMBER	%
Polystyrene Sulphonic Acid	69011-20-7	50-60
Mixture of C16-C18 Methyl Esters from Vegetable Oils		5-15
Diatomaceous Earth, Natural	61790-53-2	0.25-0.5
Graphite	7782-42-5	1-2

The criteria for listing components in the composition are as follows: Carcinogens are listed when present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or greater. Non-hazardous components may be listed at 3.0% or greater if not proprietary in nature. This is not intended to be complete compositional disclosure. Refer to section 14 for applicable states right-to-know and other regulatory information.

EMERGENCY OVERVIEW

APPEARANCE/ODOR:

Fine Gray Powder/Odorless

SHORT TERM EXPOSURE

GENERAL: No significant adverse health effects are expected to develop with normal use.

EYES: Slight to moderate irritation on direct contact.

SKIN: Persons with pre-existing skin disorders may experience slight mechanical irritation.

INHALATION: No adverse effects with normal use. Repeated or prolonged overexposure may result in respiratory symptoms, particularly in those with a pre-existing respiratory condition.

INGESTION: No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.

LISTED CARCINOGEN: NTP RoC- Not listed. IARC MONOGRAPHS – Not classified.

SECTION 4 – FIRST AID MEASURES

Most Important Symptoms/Effects, Acute and Delayed

Dusts may irritate the respiratory tract, skin and eyes.

INHALATION Move to fresh air. Call a physician if symptoms develop or persist.

SKIN CONTACT Wash off with soap and water. Get medical attention if irritation develops and persists.

EYE CONTACT Do not rub eyes. Rinse with water. Get medical attention if irritation or inflammation develops and persists.

INGESTION Rinse mouth. Get medical attention if symptoms occur.

GENERAL INFORMATION If exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.



SECTION 5 – FIRE FIGHTING MEASURES

FLASHPOINT: >200°F

EXTINGUISHING MEDIA: Use alcohol-resistant foam, carbon dioxide, dry chemical or water spray. A fog is recommended if water is used. **DO NOT USE** a solid water stream as it may scatter and spread fire. **DO NOT USE** high-pressure media which could cause formation of a potentially explosive dust-air mixture.

DECOMPOSITION PRODUCTS: Aromatic compounds, hydrocarbons, organic sulfonates, and sulfur oxides.

LOWER FLAME LIMIT: NA

HIGHER FLAME LIMIT: NA

UNUSUAL FIRE AND EXPLOSION HAZARDS: Accumulations of dust resulting from processing activities, in the presence of an ignition source, can create a potential dust explosion hazard. Good housekeeping is essential to mitigating combustible dust hazard.

FIRE FIGHTING EQUIPMENT: Fire Fighters and others exposed to products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

CHEMICAL EMERGENCY NUMBER (24 HOURS): **CHEMTREC 1-800-424-9300 USA/CANADA**

SPILL: In case of spill, if product cannot be collected and reused by sweeping or vacuuming, dispose of in accordance with applicable regulations. Minimize dust generation and accumulation. Avoid spillage into drains, surface, and ground water.

RCRA STATUS: Not regulated. Product as sold would be a nonhazardous, solid industrial waste.

SECTION 7 – HANDLING AND STORAGE

Avoid contact with skin and eyes. Avoid dust formation and accumulation. Avoid using compressed air which may create dust clouds; sweeping and vacuuming methods are preferable. Good housekeeping is essential in reducing possible slipping and combustible dust hazards.

HANDLING AND STORAGE: Store away from heat and sources of ignition. Take precautionary measures (bonding and grounding) against static discharges. Collect dust by sweeping or using a grounded vacuum cleaner equipped with a HEPA filter. Take precautions to prevent dust accumulation on surfaces. Good housekeeping is essential to mitigating combustible dust hazard. Do not store with strong oxidizing agents. Provide sufficient general ventilation during and after application. Avoid prolonged or repeated contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking or smoking.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting protective equipment.

EYE PROTECTION: Use close-fitting safety glasses, goggles or safety glasses with faceshield to prevent particles from contacting eye and causing particulate irritation.



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RESPIRATORY PROTECTION: Not normally needed. Use NIOSH approved respirator for particulates if exposure is unknown or exceeds any permissible limits.

SKIN PROTECTION: Wear protective clothing and impervious gloves if product irritates skin.

OSHA PERMISSIBLE EXPOSURE LIMITS: 5 mg/m³ Respirable Dust, 15 mg/m³ Total Dust

ACGIH THRESHOLD LIMIT VALUE: 3 mg/m³ Respirable Dust, 10 mg/m³ Total Dust

VENTILATION: General or Local exhaust.

LOCAL EXHAUST: Recommended in closed places.

Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded (see below). Consult the respirator manufacturer to determine appropriate type of equipment for a given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

VENTILATION NOTES: Provide general or local ventilation to control exposure levels below airborne exposure limits (see below). The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment. Consult NFPA Standard 91 for design of exhaust systems.

PROTECTIVE EQUIPMENT: HMIS PERSONAL PROTECTION: B: Safety Glasses, Gloves

The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Physical State	Solid
Form	Coated beads
Color	Gray-black
Odor	Mild
Odor Threshold	ND
pH	Neutral to slightly alkaline
Melting Point/ Freezing Point	N/A
Initial Boiling Point And Boiling Range	N/A
Flash Point	>200 °F
Evaporation Rate	NA
Upper/Lower Flammability Or Explosive Limits	ND
Explosive Limit – Lower (%)	ND
Explosive Limit – Upper (%)	ND
Volatiles (By Weight):	NA
Vapor Pressure:	NA
Vapor Density:	NA
Relative Density:	NA
Solubility (Water):	Insoluble



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Partition Coefficient (N-Octanol/Water):	Not available
Auto-Ignition Temperature:	NA
Decomposition Temperature	NA
Viscosity	NA
Other Information	
Density	50 lbs/ft ³
Specific Gravity	1.25-1.32

SECTION 10 – STABILITY AND REACTIVITY

STABILITY:	The product is stable and non-reactive under normal conditions of use, storage, and transport.
HAZARDOUS POLYMERIZATION: CONDITIONS TO AVOID:	No dangerous reactions known under conditions of normal use. Minimize dust generation and accumulation.
INCOMPATIBILITY:	Avoid strong oxidizing agents, Phosphorus, Maleic Anhydride, Nitroethane, Fluorine, Nitromethane, Nitroparaffins, Chlorine, and Nitropropane.

SECTION 11 – TOXICOLOGICAL INFORMATION

INFORMATION ON LIKELY ROUTES OF EXPOSURE

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Dust or powder may cause mild skin irritation.
Eye contact	May cause severe irritation, or inflammation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Dust may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity	Based on available data from Polystyrene Sulphonic Acid (Acute oral toxicity (LD50): >5000 mg/kg [Rat]) and C16-C18 Methyl Esters from Vegetable Oils (Acute oral toxicity (LD50): >2000 mg/kg [Rat]., not classified as an acute toxicant.
Skin corrosion/irritation	Based on available data, not, or only slightly irritating.
Serious eye damage/ eye irritation	Direct contact with eyes may cause severe irritation.
Respiratory or skin sensitization	Based on available data, not expected to be a skin or respiratory sensitizer.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity



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IARC: No component of this product present at levels $\geq 0.1\%$ is identified as a probable, possible, or confirmed human carcinogen.

NTP: No component of this product present at levels $\geq 0.1\%$ is identified as a known or anticipated carcinogen by NTP.

OSHA: . No component of this product present at levels $\geq 0.1\%$ is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity No data available to indicate product or any components present at greater than 0.1% are reproductive toxins.

**Specific organ toxicity -
Single exposure** Not classified.

**Specific organ toxicity -
Repeated exposure** Not classified.

Aspiration hazard Based on available data, product is not an aspiration hazard.

Chronic effects Chronic effects are not expected when product is used as intended.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	The product is not considered to be toxic to aquatic organisms. A 96-hr. lethal concentration for bluegill of biodiesel grade methyl esters was greater than 1000 mg/L. Lethal concentrations at these levels are generally deemed “insignificant” according to NIOSH (National Institute for Occupational Safety and Health) guidelines in its <i>Registry of the Toxic Effects of Chemical Substances</i> .
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:	Follow applicable governing regulations for disposal.
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Product as sold is nonhazardous per RCRA.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residue.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an



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approved waste handling site for recycling or disposal.

SECTION 14 – TRANSPORTATION INFORMATION

The data provided in this section is for information only. The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations to properly classify your shipment for transportation.

UN/NA NUMBER:	NOT REGULATED
PROPER SHIPPING NAME:	N/A
HAZARD CLASS AND LABEL:	N/A
REPORTABLE QUANTITY:	None
HARMONIZED CODE/TARIFF CODE	2504.90.0000
PACKAGING SIZE:	50# Bags

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15 – REGULATORY INFORMATION

SARA 311 CATEGORIES:

EPA ACUTE:	No
EPA CHRONIC:	No
EPA IGNITABILITY:	No
EPA REACTIVITY:	No
EPA SUDDEN RELEASE OF PRESSURE:	No
CERCLA RQ VALUE:	None
SARA TPQ:	None
SARA RQ:	None
EPA HAZARD WASTE#:	None
CLEAN AIR:	N/A
CLEAN WATER:	N/A
SARA SECTION 313:	No
NFPA HEALTH:	1
NFPA FLAMMABILITY:	0
NFPA REACTIVITY:	0
DEA Chemical Trafficking Act:	N/A
TSCA STATUS:	All ingredients in this product are on the TSCA Inventory List.

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



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Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

Canada DSL/NDSL Inventory

This product and/or its components are either listed on the Domestic Substances List (DSL) or are exempt.

SECTION 16 – OTHER INFORMATION

FOOT NOTES: N/A NOT APPLICABLE

> = GREATER THAN

ND – NO DATA AVAILABLE

< = LESS THAN

REVISION DATE: August 1, 2018

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

DISCLAIMER:

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