



# Safety Data Sheet

## JETSEAL

### SECTION 1: IDENTIFICATION

<b>Product Identifier</b>	<b>JETSEAL</b>
<b>Product Family</b>	<b>Blend</b>
<b>Recommended Use</b>	Lubricant
<b>Supplier Identifier</b>	Blackstone Drilling Fluids Ltd., 1600, 510 - 5th Street S.W., Calgary, Alberta, T2P 3S2, 403-262-5955
<b>Emergency Phone No.</b>	CANUTEC, 613-996-6666 or *666 on a cellular phone (Canada Only), 24 Hours / Day

### SECTION 2: HAZARD IDENTIFICATION

#### GHS INFORMATION

**Classification:** Combustible Dust, Category 1

#### LABEL ELEMENTS

**Hazard** None.

**Pictogram(s):**

**Signal Word:** Warning

**Hazard Statements:** May form combustible dust concentrations in air.

#### Precautionary Statements

**Prevention:** Not applicable.

**Response:** Not applicable.

**Storage:** Not applicable.

**Disposal:** Not applicable.

**Hazards Not Otherwise Classified:** Not applicable.

**Ingredients with Unknown Toxicity:** None.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is considered hazardous by the Hazardous Products Regulations.

Date: 18<sup>th</sup> December, 2018



# Safety Data Sheet

## JETSEAL

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
-------------------------	---------------------------	---------	-----------

No hazardous components are present at or above reportable levels.

### SECTION 4: FIRST-AID MEASURES

**Inhalation:** If inhaled: Call a poison center or doctor if you feel unwell.  
**Acute and delayed symptoms and effects:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Eye Contact:** If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center or doctor if you feel unwell.  
**Acute and delayed symptoms and effects:** Dust may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Skin Contact:** If on skin: Wash with plenty of water. Call a poison center or doctor if you feel unwell.  
**Acute and delayed symptoms and effects:** Dust may cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

**Ingestion:** If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.  
**Acute and delayed symptoms and effects:** May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

**General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

**Note to Physicians:** Symptoms may not appear immediately.

### SECTION 5: FIRE-FIGHTING MEASURES

#### FLAMMABILITY AND EXPLOSION INFORMATION

May form combustible dust concentrations in air.

**Sensitivity to Mechanical Impact:** This material is not sensitive to mechanical impact.  
**Sensitivity to Static Discharge:** In the form of dust, this material is sensitive to static discharge and may form explosive mixtures with air. This material is not sensitive to static discharge.

#### MEANS OF EXTINCTION

Date: 18<sup>th</sup> December, 2018



# Safety Data Sheet

## JETSEAL

<b>Suitable Extinguishing Media:</b>	Small Fire: Dry chemical, CO2, water spray or regular foam. Flood with water. Apply extinguishing media carefully to avoid creating airborne dust.  Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.
<b>Unsuitable Extinguishing Media:</b>	Not available.
<b>Products of Combustion:</b>	Oxides of carbon. Oxides of nitrogen. Oxides of sulphur.
<b>Protection of Firefighters:</b>	Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>Emergency Procedures:</b>	Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
<b>Personal Precautions:</b>	Do not touch or walk through spilled material. Use personal protection recommended in Section 8. Keep away from heat, sparks and flame. Keep container closed (and grounded). Prevent dust accumulation (to minimize explosion hazard).
<b>Environmental Precautions:</b>	Keep out of drains, sewers, ditches, and waterways.
<b>Methods for Containment:</b>	Do not flush to sewer or allow to enter waterways.
<b>Methods for Clean-Up:</b>	Use explosion-proof equipment. Dust can be a fire or explosion hazard. Sweep up and shovel into suitable containers for disposal. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.
<b>Other Information:</b>	See Section 13 for disposal considerations.

### SECTION 7: HANDLING AND STORAGE

**Handling:**  
Minimize dust generation and accumulation. Airborne dusts are potentially explosive. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654). Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. To avoid fire or explosion, ground and bond container and receiving equipment (and ground personnel) before transferring material. Do not swallow. See Section 8 for information on Personal Protective Equipment.

**Storage:**

Date: 18<sup>th</sup> December, 2018

## JETSEAL

Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Exposure Guidelines Component

Dust [CAS No. Not applicable]

**ACGIH:** 10 mg/m<sup>3</sup> (TWA) (Inhalable.); 3 mg/m<sup>3</sup> (TWA) (Respirable.); For Particles (Insoluble or Poorly Soluble) Not Otherwise Specified

**OSHA:** 15 mg/m<sup>3</sup> (Total dust) (TWA), 5 mg/m<sup>3</sup> (Respirable fraction) (TWA); For Particulates Not Otherwise Regulated (PNOR).

**TWA:** Time-Weighted Average

#### Engineering Controls:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use explosion-proof electrical, ventilating, and lighting equipment.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)



#### Eye/Face Protection:

Wear safety glasses. Indirect vented, dust-tight goggles are required if dust is generated when handling this product. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

#### Hand Protection:

Wear protective gloves. Consult manufacturer specifications for further information.

#### Skin and Body Protection:

Wear protective clothing.

#### Respiratory Protection:

If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, with particulate filter, or self-contained breathing apparatus must be used.

Date: 18<sup>th</sup> December, 2018

**JETSEAL**

**General Hygiene Considerations:** Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Mixture of fine powder to slightly coarse chunks of powder.
<b>Colour:</b>	Black.
<b>Odour:</b>	Odourless.
<b>Odour Threshold:</b>	Not available.
<b>Physical State:</b>	Solid.
<b>pH:</b>	Not available.
<b>Melting Point / Freezing Point:</b>	Not available.
<b>Initial Boiling Point:</b>	Not available.
<b>Boiling Range:</b>	Not available.
<b>Flash Point:</b>	Not available.
<b>Evaporation Rate:</b>	Not available.
<b>Flammability (solid, gas):</b>	See Section 5. May form combustible dust concentrations in air.
<b>Lower Flammability Limit:</b>	Not available.
<b>Upper Flammability Limit:</b>	Not available.
<b>Vapor Pressure:</b>	Not available.
<b>Vapor Density:</b>	Not available.
<b>Relative Density:</b>	> 1.5 (Water = 1)
<b>Solubilities:</b>	Partially soluble in water.
<b>Partition Coefficient: n-Octanol/Water:</b>	Not available.
<b>Auto-ignition Temperature:</b>	Not available.
<b>Decomposition Temperature:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Percent Volatile, wt. %:</b>	Not available.
<b>VOC content, wt. %:</b>	Not available.

Date: 18<sup>th</sup> December, 2018



# Safety Data Sheet

## JETSEAL

**Density:** Not available.  
**Coefficient of Water/Oil Distribution:** Not available.

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Contact with incompatible materials. Sources of ignition. Exposure to heat.  
**Chemical Stability:** Stable under normal storage conditions.  
**Possibility of Hazardous Reactions:** None known.  
**Conditions to Avoid:** Contact with incompatible materials. Sources of ignition. Exposure to heat.  
**Incompatible Materials:** Not available.  
**Hazardous Decomposition Products:** Acids. Bases. Oxidizers.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### EFFECTS OF ACUTE EXPOSURE

##### Product Toxicity

**Oral:** Not available.  
**Dermal:** Not available.  
**Inhalation:** Not available.

##### Component Toxicity

No LC50 or LD50 listed for the components of this product.

**Likely Routes of Exposure:** Eye contact. Skin contact. Inhalation. Ingestion.

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system.

##### Symptoms (including delayed and immediate effects)

**Inhalation:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Eye:** Dust may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

**Skin:** Dust may cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

**Ingestion:** May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Date: 18<sup>th</sup> December, 2018



# Safety Data Sheet

## JETSEAL

**Skin Sensitization:** Not available.

**Respiratory Sensitization:** Not available.

**Medical Conditions Aggravated By Exposure:** Not available.

### EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system.

**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation.

**Carcinogenicity:** This product does not contain any carcinogens or potential carcinogens above reportable thresholds as listed by ACGIH, IARC, OSHA, or NTP.

**Mutagenicity:** Not available.

**Reproductive Effects:** Not available.

#### Developmental Effects

**Teratogenicity:** Not available.

**Embryotoxicity:** Not available.

**Toxicologically Synergistic Materials:** Not available.

### SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.

**Persistence / Degradability:** Not available.

**Bioaccumulation / Accumulation:** Not available.

**Mobility in Environment:** Not available.

**Other Adverse Effects:** Not available.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Disposal Instructions:** Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

### SECTION 14: TRANSPORT INFORMATION

#### U.S. Department of Transportation (DOT)

**Proper Shipping Name:** Not regulated.

Date: 18<sup>th</sup> December, 2018



# Safety Data Sheet

## JETSEAL

**Class:** Not applicable.  
**UN Number:** Not applicable.  
**Packing Group:** Not applicable.  
**Label Code:** Not applicable.

### Canada Transportation of Dangerous Goods (TDG)

**Proper Shipping Name:** Not regulated.  
**Class:** Not applicable.  
**UN Number:** Not applicable.  
**Packing Group:** Not applicable.  
**Label Code:** Not applicable.

## SECTION 15: REGULATORY INFORMATION

### Chemical Inventories

#### US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

#### Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

### Federal Regulations

#### United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### SARA Title III

No components are listed.

### State Regulations

#### Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

No components are listed.

#### New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

No components are listed.

Date: 18<sup>th</sup> December, 2018





# Safety Data Sheet

## JETSEAL

### Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

No components are listed.

### California

**California Prop 65:** This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## Section 16: OTHER INFORMATION

**SDS Prepared By** Product Safety Committee

**Phone No.** 403-262-5955

**Date of Preparation** 18th December, 2018

**Disclaimer** To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Date: 18<sup>th</sup> December, 2018