

ONYXTONE

SECTION 1: IDENTIFICATION

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

SECTION 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification: Carcinogenicity, Category 1A
Specific Target Organ Toxicity (Repeated Exposure), Category 1

LABEL ELEMENTS

Hazard

Pictogram(s):



Signal Word: Danger

Hazard Statements: May cause cancer.

Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust or fumes.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves, protective clothing and eye protection.

Response: IF exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: 100% of this product mixture consists of ingredient(s) of unknown acute toxicity.

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.

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SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	Dimethyl dihydrogenated tallow ammonium chloride, reaction product with bentonite	68953-58-2	99 - 100
Quartz (SiO ₂)	Quartz	14808-60-7	0 - 1

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: 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: 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**

Not flammable or combustible by OSHA/WHMIS criteria.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: This material is not sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO₂, water spray or regular foam.
Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

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Unsuitable Extinguishing Media:	Not available.
Products of Combustion:	Oxides of carbon. Ammonia. Organic chlorides.
Protection of Firefighters:	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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.
Personal Precautions:	Do not touch or walk through spilled material. Use personal protection recommended in Section 8.
Environmental Precautions:	Keep out of drains, sewers, ditches, and waterways.
Methods for Containment:	Do not flush to sewer or allow to enter waterways.
Methods for Clean-Up:	Sweep up and shovel into suitable containers for disposal.
Other Information:	See Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Handling:

Do not swallow. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or fumes. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. See Section 8 for information on Personal Protective Equipment.

Storage:

Store locked up. 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

Dimethyl dihydrogenated tallow ammonium chloride, reaction product with bentonite [CAS No. 68953-58-2]

ACGIH: 10 mg/m³ (TWA) (Inhalable.); 3 mg/m³ (TWA) (Respirable.); For Particles (Insoluble or Poorly Soluble) Not Otherwise Specified

OSHA: 15 mg/m³ (Total dust) (TWA), 5 mg/m³ (Respirable fraction) (TWA); For Particulates Not Otherwise Regulated (PNOR).

Quartz [CAS No. 14808-60-7]

ACGIH: 0.025 mg/m³ (TWA); A2; Respirable fraction (2009)

OSHA: 30 / (%SiO₂ + 2) mg/m³ Quartz (Total dust) (TWA), 10 / (%SiO₂ + 2) mg/m³ Quartz (Respirable) & 250 / (%SiO₂ + 5) mppcf Quartz (Respirable) (TWA); See Table Z3. 0.1 mg/m³ (As respirable quartz) (TWA) [Vacated];

TWA: Time-Weighted Average

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Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits.

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. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light cream powder.
Colour: Light cream.
Odour: Odourless.
Odour Threshold: Not available.
Physical State: Solid.
pH: Not available.
Melting Point / Freezing Point: Not available.
Initial Boiling Point: Not available.
Boiling Range: Not available.
Flash Point: Not available.

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Evaporation Rate:	Not available.
Flammability (solid, gas):	See Section 5.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Relative Density:	Not available.
Solubilities:	Insoluble in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Viscosity:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.
Bulk Density:	0.4 to 0.6 kg/m ³
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:	Strong acids. Strong oxidizers.
Hazardous Decomposition Products:	Not available.

SECTION 11: TOXICOLOGICAL INFORMATION**EFFECTS OF ACUTE EXPOSURE****Product Toxicity**

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

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Component Toxicity

Component	CAS No.	LD50 oral	LD50 dermal	LC50
Dimethyl dihydrogenated tallow ammonium chloride, reaction product with bentonite	68953-58-2	Not available.	Not available.	Not available.
Quartz	14808-60-7	Not available.	Not available.	0.3 mg/m ³ (human); 10Y

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

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

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

Skin: 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.

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. Lungs.

Chronic Effects: Hazardous by OSHA/WHMIS criteria. May cause chronic effects. Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to Silica (Quartz, SiO₂) can cause silicosis, a form of lung scarring that can cause shortness of breath, reduced lung function, and in severe cases, death.

Carcinogenicity: May cause cancer. Respirable Silica (Quartz, SiO₂) dust is classified as a human carcinogen.

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Quartz	A2	Group 1	List 1	OSHA Carcinogen.	Listed.

Mutagenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects

Teratogenicity: Not available.



Safety Data Sheet

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Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Daphnia: LC50 > 30000 mg/L, 48 hr, OECD 202;
Algae: EC50 > 10000 mg/L, 96 hr, OECD 201.

Persistence / Degradability: Insignificant biodegradability.

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.

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)

Component

Quartz

CAS No.

14808-60-7

RTK List

E

Note: E = Extraordinarily Hazardous Substance

New Jersey

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

Component

Quartz

CAS No.

14808-60-7

RTK List

SHHS

Note: SHHS = Special Health Hazard Substance

Pennsylvania

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

Component

Quartz

CAS No.

14808-60-7

RTK List

Listed.

California

California Prop 65:



WARNING This product can expose you to Quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.



Safety Data Sheet

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SECTION 16: OTHER INFORMATION

SDS Prepared By Product Safety Committee

Phone No. 403-262-5955

Date of Preparation Dec 18, 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.