

Safety Data Sheet

Prepared for:

Anchor Drilling Fluids USA, Inc.
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Section 1: Identification

Identification of the chemical as well as the recommended uses and the essential contact information of the supplier.

Product Identifier: GSX-602 Petrogel 100

Common Name(s): Organophilic Clay

Chemical Family: N/A

Synonyms: N/A

Manufacturer, Importer, and/or Responsible Party Information

Name: Grinding & Sizing Company, LLC

Address: 515 Industrial Boulevard, Lufkin, Texas 75904

Phone Number: 936.634.7718

Emergency Phone Number: 1.800.324.0777

Recommended Use of Chemical

Chemical Services: GSX-602 Petrogel 100 is used in mud drilling operations

Use Restrictions: N/A

Section 2: Hazard(s) Identification

Identification of the hazards of the chemical presented and the appropriate warning information associated with those hazards.

Hazard Classification: C.4.2 & C.4.3 Acute Toxicity - Dermal & Inhalation: Hazard Category 4 & C.4.9 Carcinogenicity: Hazard Category 1A and 1B

Signal Word: Danger

Hazard Statement(s): May cause cancer, harmful if inhaled and in contact with skin/eyes

Pictogram(s):

Exclamation mark



Health hazard



Precautionary Statement(s):

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, clothing, eye protection and face protection. If exposed or concerned; get medical attention.

Description of any hazards not otherwise classified: None

Mixture Identification (if toxicity is unknown)

Percentage of the mixture consisting of ingredient(s) with unknown toxicity: N/A

Note: this is a total percentage of the mixture and not tied to the individual ingredient(s).

Section 3: Composition/Information on Ingredients

Identification of the ingredient(s) contained in the product, including impurities and stabilizing additives. This section includes information on substances, mixtures and all chemicals where a trade secret is claimed.

Substances

This product is a mixture

Mixtures

Chemical Names and Concentrations: Organophilic Clay, Crystalline Silica, Isopropanol

Common Name: Organophilic Clay

Synonym(s): N/A

Chemical Abstract Service (CAS) Number: Crystalline Silica: 14808-60-7
Isopropanol: 67-63-0

Any other unique identifiers: None

Impurities and stabilizing additives (which are themselves classified and which contribute to the classification of the chemical): None

Recommended Use of Chemical

Chemical Services: GSX-602 Petrogel 100 is used in mud drilling operations.

Use Restrictions: N/A

Trade Secret

Is the specific chemical identity and/or exact concentration of composition withheld as a trade secret? Yes

Section 4: First-Aid Measures

Description of the initial care that should be given by untrained responders to an individual who has been exposed to the chemical.

Necessary first-aid instructions

Individuals with respiratory disease, including but not limited to, asthma and bronchitis, or subject to eye irritation should not be exposed to respirable dust.

Inhalation:	Remove person to fresh air. Get medical attention for any breathing difficulty.
Acute Symptoms of Inhalation:	Breathing silica dust may cause irritation of the nose, throat and respiratory passages.
Delayed Symptoms of Inhalation:	May not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of silica dust may also cause silicosis.
Skin Contact:	Wash exposed area with soap and water. Get medical advice if irritation develops.
Acute Symptoms of Skin Contact:	May cause irritation
Delayed Symptoms of Skin Contact:	None known
Eye Contact:	Flush thoroughly with large amounts of running water for at least 15 minutes. Get medical advice if irritation develops.
Acute Symptoms of Eye Contact:	Dust may cause irritation and/or redness to the eyes
Delayed Symptoms of Eye Contact:	None known
Ingestion:	Not anticipated route of exposure. If large amounts were ingested get medical advice.
Acute Symptoms of Ingestion:	None known
Delayed Symptoms of Ingestion:	None known

Immediate Medical Care / Special Treatment

Is immediate medical care or special treatment required?	No
If so, what is needed:	N/A

Section 5: Fire-Fighting Measures

Recommendations for fighting a fire caused by or including the chemical.

Suitable Extinguishing Equipment:	Use media applicable to surrounding material (this product will not support combustion)
Extinguishing equipment not appropriate:	N/A
Specific hazards created from chemical burning:	None known
Special protective equipment needed:	Normal firefighting protective equipment is sufficient.

Section 6: Accidental Release Measures	
<i>Recommendations on the appropriate response to spills, leaks, or releases; including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment.</i>	
Personal Precautions:	Wear appropriate protective equipment
Emergency Procedure(s):	N/A
Method(s) and material(s) used for containment:	Minimize dust generation
Cleanup procedure(s):	Collect using dustless method and place in suitable container for reuse or disposal. Material is slippery when wet.

Section 7: Handling and Storage	
<i>Guidance on the safe handling practices and conditions for safe storage of the chemical.</i>	
Handling precautions:	This product may contain crystalline silica. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure below recommended exposure limits. Wear a NIOSH approved respirator or equivalent when using this product.
Hygiene practices:	Normal hygiene practices are sufficient.
Safe storage recommendation:	Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container. Avoid moisture.
Incompatible storage options:	N/A

Section 8: Exposure Controls/Personal Protection		
<i>Identification of the exposure limits, engineering controls, and personal protective measures that can be used to minimize worker exposure.</i>		
OSHA Permissible Exposure Limits (PELs):	Crystalline Silica* (Respirable) 10 mg/m ³ Crystalline Silica* (Total Dust) 30 mg/m ³ Isopropanol 400ppm <i>*If cristobalite or tridymite is detected, ½ the value</i>	
American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs):	Chemical	ACGIH TLV
	Crystalline Silica	TWA: 0.025 mg/m ³ MW: 60.06
	Isopropanol	TWA: 200 ppm STEL: 400 ppm MW: 60.09
	Chemical	ACGIH BEI®
Isopropanol	40 mg/L (acetone in urine) End of shift at end of work week	
Exposure limit (recommended by manufacturer, importer or employer):	N/A	
Appropriate Engineering Controls:	Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable limits. Maintain eye wash station in work area.	
Recommendations for personal protective measures:	Use NIOSH approved mechanical filter respirator when dust levels exceed exposure limits. Work gloves are optional. Wear safety glasses or goggles.	
Special requirements of PPE, protective clothing or respirators:	None	

Section 9: Physical and Chemical Properties

Identification of physical and chemical properties associated with the substance or mixture.

Appearance (Physical State):	Powder
Color:	Tan, Gray or Cream
Odor:	None
Odor Threshold:	Not regulated
Vapor Pressure:	N/A
Density:	35-37 (un compacted at 20°C)
pH:	N/A
Specific Gravity:	1.6
Melting Point:	N/A
Freezing Point:	N/A
Solubility(ies):	Insoluble
Initial Boiling Point:	N/A
Boiling Range:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability:	0
Upper/lower flammability or explosive limits:	N/A
Partition Coefficient:	N/A
Auto-Ignition Temperature:	N/A
Decomposition Temperature:	N/A
Viscosity:	N/A

Section 10: Stability and Reactivity

Description of the reactivity hazards of the chemical and the chemical stability information.

Reactivity	
Description of specific test data:	None
Chemical Stability	
Is the chemical stable or unstable:	Stable under normal conditions of use and storage
Stabilizers needed to maintain chemical stability:	None
Safety issues that may arise should the chemical change in physical appearance:	None known
Other	
Conditions in which hazardous reactions may occur:	None known
Possibility of hazardous reactions:	Low
Will chemical react or polymerize:	No
Will chemical release pressure, heat, or any other hazardous conditions:	No
Conditions to avoid:	None known
Class(es) of incompatible material(s):	None known
Known or anticipated hazardous decomposition products produced because of storage, use, or heating:	None known

Section 11: Toxicological Information

Identification of toxicological and/or health effects.

Likely routes of exposure: Inhalation, skin/eye contact

Delayed, immediate or chronic effects of short-term exposure: May cause irritation of the nose, throat, respiratory passages, eyes, and skin. May cause redness to the eyes

Delayed, immediate or chronic effects of long-term exposure: May not cause noticeable injury or illness though permanent lung damage may be occurring from inhalation. May also cause silicosis

Numerical measurement of toxicity: Health: 1, Flammability: 0, Reactivity: 0

Description of symptoms (lowest to most severe): Irritation, Redness to the eyes
Lung damage, Silicosis

Is chemical listed in the National Toxicology Program (NTP) Report on Carcinogens: Yes

Has chemical been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs: Yes

Has chemical been found to be a potential carcinogen by OSHA: Yes

Section 12: Ecological Information (non-mandatory)

Information to evaluate the environmental impact of the chemical if it were released to the environment.

Toxicity test results performed on aquatic and/or terrestrial organisms: LD50: >5000 mg/kg (Rat)

Does the chemical have the potential to degrade the environment (biodegradation, oxidation, hydrolysis, etc.): No

Bioaccumulation test results: None

Potential of chemical moving from soil to the groundwater: No

Other adverse effects: None known

Section 13: Disposal Considerations (non-mandatory)

Guidance on proper disposal practices, recycling or reclamation of the chemical or its container. Safe handling practices to minimize exposure. (Refer to section 8 for more information)

Appropriate disposal containers: Original container or similar

Appropriate disposal methods: N/A

Physical and chemical properties that may affect disposal activities: None known

Special precautions for landfills or incineration activities: None

Is it advisable to utilize sewage disposal for this chemical: No

Section 14: Transport Information (non-mandatory)

Guidance on classification information for shipping and transporting the chemical by road, air, rail, or sea.

This product is not a DOT/IMO Hazardous Material.

Section 15: Regulatory Information (non-mandatory)

Identification of safety, health and environmental regulations specific for the chemical that is not indicated anywhere else on this SDS.

Chemical Weapons Convention (CWC): This product does not contain any chemicals listed under the CWC schedules of chemicals.

Clean Air Act - Hazardous Air Pollutants (HAP): This product does not contain any chemicals listed within the Hazardous Air Pollutants.

Clean Air Act - Ozone Depleting Substances (ODS): This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpart A, App. A+B).

Clean Water Act - Priority Pollutants (PP): This product does not contain any PP listed under the U.S. Clean Water Act, Section 307 (2)(1) PP List (40 CFR 401.15).

Occupational Safety and Health Act (OSHA): The OSHA Hazard Communication Standard (29 CFR 1910.1200) defines this chemical as a C.4.2 & C.4.3 Acute Toxicity - Dermal & Inhalation: Hazard Category 4 & C.4.9 Carcinogenicity: Hazard Category 1A and 1B. For more information, see Section 2 of this SDS.

Resource Conservation and Recovery Act (RCRA): This product is not considered to be a P- or U-Listed hazardous waste under RCRA (40 CFR 261).

Superfund Amendments and Reauthorization Act (SARA) Title III: Section 302 - Extremely Hazardous Substances (EHS): This product does not contain any chemicals regulated under Section 302 (40 CFR 355) as extremely hazardous substances.

Superfund Amendments and Reauthorization Act (SARA) Title III: Section 304 - Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): This product does not contain any chemicals regulated under Section 304 (40 CFR 302) as hazardous substance(s) for emergency release notification.

Superfund Amendments and Reauthorization Act (SARA) Title III: Section 311/312 - Hazard Communication Standard (HCS): This product is regulated under Section 311-312 (40 CFR 370).

Superfund Amendments and Reauthorization Act (SARA) Title III: Section 313 Toxic Chemical List (TCL): This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

TSCA Section 5(e) - Consent Order / Significant New Use Rule (SNUR): The following chemical(s) are subject to a Section 5(3) Consent Order for Significant New Use Rule (SNUR):

Chemical Name: Crystalline Silica

CASRN: 14808-60-7

Chemical Name: Isopropanol

CASRN: 67-63-0

TSCA Section 8(b) - Inventory Status: The following chemical(s) are subject to TSCA Section 8(b):

Chemical Name: Crystalline Silica

CASRN: 14808-60-7

Chemical Name: Isopropanol

CASRN: 67-63-0

TSCA Section 12(b) - Export Notification: This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

Items in red require immediate attention.

Section 16: Other Information

Date of SDS Preparation: October 24, 2013

Revision Date: N/A

Changes from previous version: N/A

Other useful information:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any damage or expense.