

# Material Safety Data Sheet

GEO Drilling Fluids, Inc.

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Date of Revision: 3/2005

GEO ZAN

## Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** GEO ZAN, Xanthan Gum

**Chemical Formula:**

**CAS Number:** 11138-66-2

**Other Designations:**

**Derivation:**

**General Use:**

**Emergency Telephone:** 1-800-424-9300 (Chemtrec)

## Section 2 - Composition / Information on Ingredients

| Ingredient Name | CAS Number | EINECS/ELINCS | % wt or % vol |
|-----------------|------------|---------------|---------------|
| Xanthan Gum     | 11138-66-2 | 234-394-2     | 98.0 - 100    |

**Trace Impurities:**

| Ingredient  | OSHA PEL             |             | ACGIH TLV            |             | NIOSH REL   |             | NIOSH       |
|-------------|----------------------|-------------|----------------------|-------------|-------------|-------------|-------------|
|             | TWA                  | STEL        | TWA                  | STEL        | TWA         | STEL        | IDLH        |
| Xanthan Gum | 10 mg/m <sup>3</sup> | none estab. | 15 mg/m <sup>3</sup> | none estab. | none estab. | none estab. | none estab. |

## Section 3 - Hazards Identification

### Emergency Overview

**This material can form dust that may cause skin or mucous membrane irritation. Symptoms may include redness, burning, and swelling. Although they may cause respiratory tract irritation, nuisance dusts do not form scar tissue or affect the structure of air spaces in the lungs. Their effects on the tissues are potentially reversible.**

| HMIS             |   |
|------------------|---|
| H                | 1 |
| F                | 0 |
| R                | 0 |
| PPE <sup>†</sup> |   |
| †Sec. 8          |   |

### Potential Health Effects

**Primary Entry Routes:** Inhalation, Skin contact, Eye contact.

**Target Organs:** none

**Acute Effects**

**Inhalation:** This material is a dust or may produce dust. Breathing small amounts of this material is not likely to be harmful.

**Eye:** Dust can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

**Skin:** Unlikely to cause skin irritation or injury.

**Ingestion:** Swallowing this material is not likely to be harmful.

**Carcinogenicity:** IARC, NTP, and OSHA do not list Xanthan Gum as a carcinogen.

**Medical Conditions Aggravated by Long-Term Exposure:** None known.

**Chronic Effects:** None known.

## Section 4 - First Aid Measures

**Inhalation:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

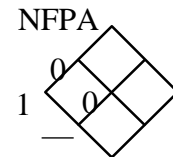
**Eye Contact:** If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Skin Contact:** First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

**Ingestion:** First aid is not normally required. If symptoms develop, seek medical attention.

**After first aid, get appropriate in-plant, paramedic, or community medical support.**

**Note to Physicians:**

**Special Precautions/Procedures:****Section 5 - Fire-Fighting Measures****Flash Point:** N/A**Flash Point Method:** N/A**Autoignition Temperature:** N/A**LEL:** N/A**UEL:** N/A**Flammability Classification:****Extinguishing Media:** regular foam, water fog, carbon dioxide, sand.**Unusual Fire or Explosion Hazards:** Organic dusts can form explosive mixtures in air.**Hazardous Combustion Products:** May form: carbon dioxide and carbon monoxide.**Fire-Fighting Instructions:** Do not release runoff from fire control methods to sewers or waterways.**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.**Section 6 - Accidental Release Measures****Spill /Leak Procedures:****Small Spills:** Sweep up material for disposal or recovery.**Large Spills****Containment:** For large spills, dike far ahead of spill for later disposal. Shovel material into containers. Do not release into sewers or waterways.**Cleanup:** Thoroughly sweep area of spill to clean up any residual material.**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).**Section 7 - Handling and Storage****Handling Precautions:** Use good personal hygiene practices. All hazard precautions given in the data sheet must be observed.**Storage Requirements:** Store in a cool, dry place at 75 °F or lower.**Section 8 - Exposure Controls / Personal Protection****Engineering Controls:****Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.**Administrative Controls:****Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.**Protective Clothing/Equipment:** Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## Section 9 - Physical and Chemical Properties

|  |  |
|--|--|
| <b>Physical State:</b> solid                                     | <b>Water Solubility:</b> soluble       |
| <b>Appearance and Odor:</b> beige powder/bland odor              | <b>Other Solubilities:</b>             |
| <b>Odor Threshold:</b>   | <b>Boiling Point:</b> no data          |
| <b>Vapor Pressure:</b>   | <b>Freezing/Melting Point:</b> no data |
| <b>Vapor Density (Air=1):</b>                                    | <b>Viscosity:</b> no data              |
| <b>Formula Weight:</b>   | <b>Refractive Index:</b>               |
| <b>Density:</b>  | <b>Surface Tension:</b>                |
| <b>Specific Gravity (H<sub>2</sub>O=1, at 4 °C):</b> 1.5 @ 77 °F | <b>% Volatile:</b>                     |
| <b>pH:</b> no data   | <b>Evaporation Rate:</b>               |

## Section 10 - Stability and Reactivity

**Stability:** Xanthan Gum is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization cannot occur.

**Chemical Incompatibilities:** Strong oxidizing agents.

**Conditions to Avoid:** Protect from moisture.

**Hazardous Decomposition Products:** Thermal oxidative decomposition of Xanthan Gum can produce carbon dioxide and carbon monoxide.

## Section 11- Toxicological Information

### Toxicity Data:\*

#### Acute Oral Effects:

Rat, oral, LD<sub>50</sub>: mg/kg

**Chronic Effects:** no data available

**Carcinogenicity:** : no data available

**Mutagenicity:** : no data available

**Teratogenicity:** : no data available

\* See NIOSH, RTECS, for additional toxicity data.

## Section 12 - Ecological Information

**Ecotoxicity:** no data available

**Environmental Fate:** no data available

**Environmental Degradation:** no data available

**Soil Absorption/Mobility:** no data available

## Section 13 - Disposal Considerations

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

**Disposal Regulatory Requirements:**

## Section 14 - Transport Information

### DOT Transportation Data (49 CFR 172.101): Not Regulated.

|                                      |                                 |                                     |
|--------------------------------------|---------------------------------|-------------------------------------|
| <b>Shipping Name:</b>                | <b>Packaging Authorizations</b> | <b>Quantity Limitations</b>         |
| <b>Shipping Symbols:</b>             | a) Exceptions:                  | a) Passenger, Aircraft, or Railcar: |
| <b>Hazard Class:</b>                 | b) Non-bulk Packaging:          | b) Cargo Aircraft Only:             |
| <b>ID No.:</b>                       | c) Bulk Packaging:              |                                     |
| <b>Packing Group:</b>                |                                 | <b>Vessel Stowage Requirements</b>  |
| <b>Label:</b>                        |                                 | a) Vessel Stowage:                  |
| <b>Special Provisions (172.102):</b> |                                 | b) Other:                           |

## Section 15 - Regulatory Information

### US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a): None listed

CERCLA RQ - 40 CFR 302.4(b)

Materials without a "listed" RQ may be reportable as an "unlisted hazardous substance". See 40 CFR 302.5 (b).

SARA 302 Components - 40 CFR 355 Appendix A: None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate( ) Delayed( ) Fire( ) Reactive( ) Sudden

Release of Pressure( )

SARA 313 Components - 40 CFR 372.65: None

International Regulations - Inventory Status: Not determined

State and Local Regulations - California Proposition 65: None

### Section 16 - Other Information

**Disclaimer:** All information, recommendations and suggestions appearing herein are based upon sources believed to be reliable: However, it is the users responsibility to determine the safety, toxicity and suitability for its own use of this product. WEGO CHEMICAL & MINERAL CORP. DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE USE BY OTHERS OF THIS PRODUCT.