

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Code: 130114
Product Name: OP-T-Gel GRS-200
Category: Guar Slurry
Company Name: OptiFrac Chemical Services
910, 640 -5th Avenue SW
Calgary, AB T2P 3G4
Phone Number: (403)237-8900
Emergency Contact: 24 hour Emergency #: (CANUTEC) (613)996-6666

2. HAZARDS IDENTIFICATION

Aspiration Toxicity, Category 1

Skin Corrosion/Irritation, Category 2

Specific Target Organ Toxicity (single exposure), Category 3



GHS Signal Word: **Danger**

GHS Hazard Phrases:
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H335 - May cause respiratory irritation.

GHS Precaution Phrases:
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 - Do NOT induce vomiting.
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P332+313 - If skin irritation occurs, get medical advice/attention.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

GHS Storage and Disposal Phrases:
P501 - Dispose of contents/container to local and federal regulations.

Potential Health Effects (Acute and Chronic): Prolonged or repeated skin contact may cause defatting and dermatitis.

Inhalation: May cause respiratory irritation.

Skin Contact: May cause irritation with burning pain, itching and redness. May cause sensitization by skin contact.

Eye Contact: May cause eye irritation.

Ingestion: Aspiration hazard. May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Ingredient(s)	Concentration
64742-47-8	Hydrotreated light distillate (petroleum)	40.0 -65.0 %
9000-30-0	Gum guar	20.0 -50.0 %
127087-87-0	Nonylphenol ethoxylated	1.0 -5.0 %

4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

- In Case of Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Seek medical advice/attention if you feel unwell.
- In Case of Skin Contact:** Wash exposed area with soap and water thoroughly. Remove contaminated clothing and wash before reuse. Seek medical advice/attention if irritation develops or persists.
- In Case of Eye Contact:** Immediately flush eyes with running water for at least 15 minutes. Remove contact lenses if present after the first 5 minutes. Seek medical advice/attention if irritation develops or persists.
- In Case of Ingestion:** Potential for aspiration if swallowed. Rinse mouth with water. Do NOT induce vomiting. Never give anything to and unconscious person. Seek medical advice/attention immediately.
- Note to Physician:** Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

- Flash Pt:** > 200.00 F (93.3 C) Method Used: ASTM D Closed Cup
- Explosive Limits:** LEL: UEL:
- Autoignition Pt:** No data.
- Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam. Use agent most appropriate to extinguish fire.
- Fire Fighting Instructions:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Runoff from fire control or dilution water may cause pollution.
- Flammable Properties and Hazards:**

6. ACCIDENTAL RELEASE MEASURES

- Steps To Be Taken In Case Material Is Released Or Spilled:** Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation. Avoid generating dusty conditions.



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7. HANDLING AND STORAGE

Precautions To Be Taken in Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep away from heat and flame. Minimize dust generation and accumulation.

Precautions To Be Taken in Storing: Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Components (Chemical Name)	OSHA TWA	ACGIH TWA	Other Limits
64742-47-8	Hydrotreated light distillate (petroleum)		TLV: 200 mg/m3	
9000-30-0	Gum guar			
127087-87-0	Nonylphenol ethoxylated			

Respiratory Equipment (Specify Type): Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: tan.
Petroleum-like.

Freeze Point/Pour Point: -5.00 F (-20.6 C) - -10.00 F (-23.3 C)

Boiling Point: No data.

Autoignition Pt: No data.

Flash Pt: > 200.00 F (93.3 C) Method Used: ASTM D Closed Cup

Explosive Limits: LEL: UEL:

Specific Gravity (Water = 1): 1.04+/-0.05

Vapor Pressure (vs. Air or mm Hg):

Vapor Density (vs. Air = 1):

Evaporation Rate:

Solubility in Water:



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Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability: ignition sources, Incompatible materials, dust generation.
Incompatibility - Materials To Avoid: Strong oxidizing agents.
Hazardous Decomposition or Byproducts: Nitrogen oxides, Carbon monoxide, oxides of sulfur, irritating and toxic fumes and gases, acrid smoke and fumes.
Possibility of Hazardous Reactions: Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:

11. TOXICOLOGICAL INFORMATION

Toxicological Information: The product has not been tested. Any statements on toxicology have been derived from products of a similar structure and composition.
CAS# 9000-30-0:
Carcinogenicity/Other Information: Acute toxicity, LD50, Oral, Mouse, 8100. MG/KG.
Result:
Behavioral: Fluid intake.
Kidney, Ureter, Bladder: Changes in tubules (including acute renal failure, acute tubular necrosis).
Related to Chronic Data - death.
- Food & Drug Research Laboratories, Inc., Papers., Vol/p/yr: 124,-, 1976
CAS# 64742-47-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 9000-30-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS #	Ingredient(s)	NTP	IARC	ACGIH	OSHA
64742-47-8	Hydrotreated light distillate (petroleum)			A4	
9000-30-0	Gum guar				
127087-87-0	Nonylphenol ethoxylated				

12. ECOLOGICAL INFORMATION

General Ecological Information: The product has not been tested. Any statements on eco-toxicology have been derived from products of a similar structure and composition.
Results of PBT and vPvB assessment: CAS# 64742-47-8:
LC50, Bluegill (Lepomis macrochirus), 5900. UG/L, 4 D, Mortality, Water temperature: 18.00 C C, pH: 7.50.
Result:
Age Effects.
- Report to Nalco Chemical Company: Four-Day Static Fish Toxicity Studies with D-2303 in Rainbow Trout and Bluegills: IBT No. A615, Hamlin, J., 1971



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13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: RCRA: It is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24).

Disposal: Whatever cannot be saved for recovery or recycling should be disposed of in accordance with local, state, and federal regulations. Consult state or local regulation for any additional handling, treatment, or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal, or recycling facility.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.
DOT Hazard Class:
UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.
UN Number:
Hazard Class:

TDG Classification:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Ingredient(s)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
64742-47-8	Hydrotreated light distillate (petroleum)	No	No	No
9000-30-0	Gum guar	No	No	No
127087-87-0	Nonylphenol ethoxylated	No	No	No

This material meets the EPA Yes No Acute (immediate) Health Hazard
'Hazard Categories' defined Yes No Chronic (delayed) Health Hazard
for SARA Title III Sections Yes No Fire Hazard
311/312 as indicated: Yes No Sudden Release of Pressure Hazard
 Yes No Reactive Hazard

CAS #	Ingredient(s)	Canadian NPRI	Canadian IDL	Canadian DSL
64742-47-8	Hydrotreated light distillate (petroleum)	Yes	No	Yes
9000-30-0	Gum guar	No	No	Yes
127087-87-0	Nonylphenol ethoxylated	No	No	Yes

CAS #	Ingredient(s)	Other US EPA or State Lists
64742-47-8	Hydrotreated light distillate (petroleum)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
9000-30-0	Gum guar	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
127087-87-0	Nonylphenol ethoxylated	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

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Inventory, 8A PAIR; CA PROP.65: No

CAS #	Ingredient(s)
64742-47-8	Hydrotreated light distillate (petroleum)
9000-30-0	Gum guar
127087-87-0	Nonylphenol ethoxylated

International Regulatory Lists

Canadian WHMIS Classification:



CLASS D, DIVISION 2, SUBDIVISION B: Toxic Materials (Mutagenicity, skin sensitization, irritation, etc.)

Regulatory Information: Canadian regulations: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION

Revision Date: 04/14/2015

Additional Information About This Product:

Company Policy or

Disclaimer:

The information accumulated herein is believed to be accurate based on the information provided, although no guarantee or warranty, either expressed or implied is made as to the accuracy or completeness of this information, whether originating with this company or not. Recipients are advised to confirm in advance of need that the information is correct, applicable and suitable to their circumstances. The conditions or methods of handling, storage, use and disposal of the product and container are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage or use of this information or product. If the product is used as a component in another product, this information may not be applicable.