

CHEMPLEX

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Plexgel 907L-EB

MATERIAL SAFETY DATA SHEET

Date Prepared:..... 12/30/2009

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Product Number:..... 00410-EB

Emergency Number:.... **800-633-8253**

SECTION I – PRODUCT IDENTIFICATION

PRODUCT NAME:	Plexgel 907L-EB
SYNOMYS:	N/A
CHEMICAL FAMILY:	Hydrocarbon petroleum distillate
CAS NUMBER:	Mixture
PRODUCT USE:	Viscosifier for water

SECTION II – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- CAUTION! May cause eye, skin, or respiratory tract irritation. May be harmful if ingested. SLIP HAZARD! Interaction of water and spills of this product produce extremely slippery surfaces.

ROUTE OF ENTRY:

- Ingestion, Inhalation, Dermal Contact, Eye Contact

HAZARD SYMBOLS:

- Methyl Alcohol: T F
- Petroleum Hydrotreated Light Distillate: XN

° See Section XVI for symbol descriptions.

ACUTE EFFECT ON HUMANS:

- Methanol poisoning can cause blindness and death. The lethal oral dose in humans is 2 to 8 ounces. Most cases have occurred after ingestion. Methanol poisoning after inhalation or skin absorption in the workplace has been reported. Symptoms of methanol poisoning include initial CNS depression and vomiting followed by metabolic acidosis and severe vision impairment 8-24 hours later. Coma, respiratory failure, and death may ensue. In high-dose reproductive studies in animals, methyl alcohol causes testicular damage and birth defects. Patients may present with inebriation and gastritis. There is a characteristic latency of 6-30 hours after exposure. Combined osmolar and anion gaps suggest poisoning by methanol or ethylene glycol, but also may occur in severe alcoholic ketoacidosis or diabetic ketoacidosis.
- Petroleum Hydrotreated Light Distillate is irritating to the eyes, the skin and the respiratory tract. The vapor irritates the eyes, the skin, and the respiratory tract. The substance may cause effects on the liver and kidneys, resulting in impaired functions. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Aspiration into lungs may cause chemical pneumonitis, which may be fatal.

Plexgel 907L-EB

CHRONIC EFFECTS ON HUMANS:

- Methyl alcohol is toxic to the nervous system, the reproductive system. Passes through the placental barrier. May be fatal or cause blindness if swallowed. Overexposure to petroleum distillates has been found to cause liver and kidney damage in laboratory animals.

OSHA REGULATIONS:

- This substance is considered not hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

RISK PHRASES:

- Methyl Alcohol : R 11,23/24/25,39,23/24/25
- Petroleum Hydrotreated Light Distillate: R 65

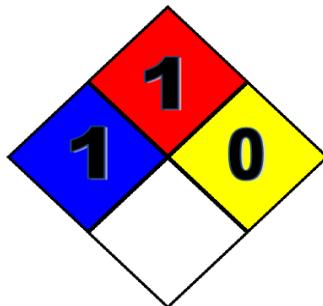
° See Section XVI for phrase descriptions.

SAFETY PHRASES:

- Methyl Alcohol : S 7,16,24,36,37,45
- Petroleum Hydrotreated Light Distillate: S 23, 24/25, 62

° See Section XVI for phrase descriptions.

NFPA RATING:



HMIS:



SECTION III – COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	PERCENT	CAS NUMBER
ALCOHOL ETHOXYLATE	< 1%	PROPRIETARY
C-11 – C-14 N-ALKANES	0-50%	1120-21-4 629-50-5 112-40-3 629-59-4
CRYSTALLINE SILICA	< 0.02%	14808-60-7
GUAR GUM	0-50%	9000-30-0
PETROLEUM HYDROTREATED LIGHT DISTILLATE	0-50%	64742-47-8
PROPYLENE PENTAMER	0-50%	15220-87-8
ORGANOPHYLIC CLAY	1-2%	PROPRIETARY
METHYL ALCOHOL	<1%	67-56-1

Plexgel 907L-EB

SECTION IV – FIRST AID MEASURES

INHALATION:

- **SLIGHT INHALATION:** Allow victim to rest in a well-ventilated area. Seek medical attention if breathing becomes laborious.
- **HAZARDOUS INHALATION:** Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waist band. If breathing is difficult, administer oxygen. If the victim is not breathing, have trained person administer artificial respiration. Seek immediate medical attention.

INGESTION:

- Not typical route of exposure. However, if ingestion does occur: DO NOT administer anything by mouth. Do not induce vomiting. If spontaneous vomiting occurs, keep head below hips to prevent aspiration. If any symptoms occur within the following 6 hours seek immediate medical attention; fever greater than 101°F, shortness of breath, chest congestion, or continued coughing or wheezing.

EYE CONTACT:

- Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do NOT use an eye ointment. Seek medical attention.

SKIN CONTACT:

- If the chemical contacts exposed skin, such as the hands gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible and rinse thoroughly under a deluge shower. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

SECTION V – FIRE FIGHTING MEASURES

FLASHPOINT:

- >200°F Closed Cup

FLAMMABLE CONDITIONS:

- Explosive in the form of vapor when exposed to heat or flame.
- Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition, it emits acrid smoke and irritating fumes

SPECIAL FIRE FIGHTING PROCEDURES/MEDIA:

- Proper protective equipment, including breathing apparatus, should be worn when approaching fire and confined space.
- **SMALL:** Use dry chemical powder.
- **LARGE:** Use alcohol foam, water spray or fog. DO NOT use water jet.

SPECIAL FIRE AND EXPLOSION HAZARDS:

- Hazardous combustion products may include a complex mixture of airborne solid and liquid particulates and gases(acrid smoke and irritating fumes)
- Will float, and can be reignited on surface of water.
- Vapor may travel considerable distance to source of ignition and flash back.

Plexgel 907L-EB

SECTION VI – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

- Evacuate surrounding areas. Keep unwarranted and unprotected personnel from entering the area. Shut off all ignition sources. No flares, smoking or open flames in hazard area. Wear appropriate personal protective equipment when in hazard area. Ventilate closed spaces before entry.

CLEAN-UP METHODS:

- **SMALL SPILL:** Absorb with an inert dry material and place in an appropriate waste disposal container.
- **LARGE SPILL:** Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material and place in appropriate waste disposal container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.
 - Finish cleaning by spreading water on the contaminated surface and absorbing with inert dry material and place in appropriate waste disposal container.
 - CAUTION! SLIP HAZARD! Contact of the spilled material with water produces VERY SLIPPERY surfaces.
 - Repeat process until contaminated surface is no longer slippery.

ENVIRONMENTAL PRECAUTIONS:

- Prevent entry into sewers, basements or confined areas. Dike if necessary.

SECTION VII – HANDLING & STORAGE

HANDLING:

- Wear appropriate personal protective equipment when handling.
- Keep away from heat and all sources of ignition.
- Keep in secure location.
- Ground all equipment containing material.
- DO NOT ingest; If ingested, seek medical advice immediately and show label or container
- DO NOT breathe gas, fumes, vapors or spray. In case of insufficient ventilation, wear suitable respiratory equipment.
- Avoid contact with skin and eyes (irritant).
- Keep away from incompatibles as oxidizing agents, acids.

STORAGE:

- Never store in an un-labeled container.
- Keep in a cool, well-ventilated place.
- Avoid extreme temperatures including elevated temperatures and freezing temperatures
- Optimal storage temperature: 41 - 81°F
- Keep away from heat and sources of ignition.
- Keep container tightly closed.
- Ground all equipment containing material.
- Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.
- DO NOT contaminate product or container with water.

Plexgel 907L-EB

SECTION VIII – EXPOSURE CONTROLS / PERSONAL PROTECTION

CHEMICAL INGREDIENT	ACGIH	NIOSH	OSHA
METHYL ALCOHOL	200 ppm 262mg/m ³ TWA; 250 ppm, 327mg/m ³ STEL	200 ppm, 260mg/m ³ TWA; 250 ppm, 325mg/m ³ STEL	200 ppm TWA; 260 mg/m ³ TWA 250 ppm STEL; 325 mg/m ³ TWA
PETROLEUM HYDROTREATED LIGHT DISTILLATE	5 mg/m ³ (oil mist) TLV 10 mg/m ³ (oil mist) STEL	5 mg/m ³ (oil mist) TLV 10 mg/m ³ (oil mist) STEL	5 mg/m ³ (oil mist) PEL

NOTE: Only components of this product with established exposure limits appear in above chart.

ODOR THRESHOLD:

- Methyl Alcohol: • (Low):4.2 ppm; (High):5960ppm
- Petroleum Distillate: • Not established

LETHAL CONCENTRATION:

- Methyl Alcohol: • LC₅₀ (Rats): 64,000 ppm/4hr
- Petroleum Distillate: • Not established

RESPIRATORY PROTECTION:

- Use MSHA/NIOSH approved respirator or equivalent

PROTECTIVE CLOTHING/EQUIPMENT:

- Goggles, lab coat/ apron, gloves

ENGINEERING CONTROLS:

- Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Use adequate ventilation to keep airborne concentrations below recommended or statutory limits.

SECTION IX – PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:

- Tan to Brown Oily Slurry

ODOR:

- Kerosene-like

BOILING POINT:

- >400°F

FLASHPOINT:

- >200°F Closed Cup

VAPOR DENSITY (AIR=1):

- >14

SPECIFIC GRAVITY (WATER=1):

- 1.01 – 1.04

pH:

- 6 to 8

WT:

- 8.4 to 8.6 pounds per gallon

SECTION X – STABILITY & REACTIVITY

STABILITY:

- The product is stable.

REACTIVITY:

- Reactive with oxidizing agents, acids. Slightly reactive to reactive with moisture.

Plexgel 907L-EB

SECTION XI – TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

CHEMICAL	RESULT	SPECIES	DOSE
METHYL ALCOHOL	LD ₅₀ Dermal	Rabbit	15800 mg/kg
	LD ₅₀ Oral	Rabbit	14200 mg/kg
	LD ₅₀ Oral	Rat	5600 mg/kg
	LC ₅₀ Inhalation Gas	Rat	64000 ppm
	LC ₅₀ Inhalation Vapor	Mouse	50000 ppm
PETROLEUM HYDROTREATED LIGHT DISTILLATE	LD ₅₀ Dermal	Rabbit	>2000 mg/kg
	LD ₅₀ Oral	Rat	>5000 mg/kg
	LC ₅₀ Inhalation (4 hour)	Rat	>5 mg/L ppm

- Methanol poisoning can cause blindness and death. The lethal oral dose in humans is 2 to 8 ounces. Most cases have occurred after ingestion. Methanol poisoning after inhalation or skin absorption in the workplace has been reported. Symptoms of methanol poisoning include initial CNS depression and vomiting followed by metabolic acidosis and severe vision impairment 8-24 hours later. Coma, respiratory failure, and death may ensue. In high-dose reproductive studies in animals, methyl alcohol causes testicular damage and birth defects. Patients may present with inebriation and gastritis. There is a characteristic latency of 6-30 hours after exposure. Combined osmolar and anion gaps suggest poisoning by methanol or ethylene glycol, but also may occur in severe alcoholic ketoacidosis or diabetic ketoacidosis.
- Petroleum Hydrotreated Light Distillate is a primary skin irritant, but not skin sensitizer, and an eye and mucous membrane irritant. Inhalation of vapors or mist may cause irritation to the respiratory system. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis, which can be fatal. Material is not considered to be a mutagenic hazard; not classified as a carcinogen. Repeated skin contact tends to remove skin oils, possibly leading to irritation and dermatitis, and has resulted in irritation and skin cancer in animals. Material is not expected to impair fertility; not classified as a developmental toxicant. High concentrations may cause central nervous system depression, resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death. Repeated exposure is known to have caused kidney effects in male rats which are not considered relevant to humans. In a 90-day oral gavage (rats) study at 100, 500, and 1000 mg/kg, no treatment related mortalities were observed.
 - There were no significant changes in body weights or food consumption in any dose groups.
 - Increased liver weights were observed in rats at 500 and 1000 mg/kg.
 - Testes weights were significantly elevated in male rats at 1000 mg/kg.
 - Kidney effects, indicative of light hydrocarbon nephropathy, occurred in male rat kidneys at all dose levels.
 - Histology findings of hepatocellular hypertrophy were seen in the livers of male rats at 1000 mg/kg and in female rats at 500 and 1000 mg/kg.
 - All treatment-related effects were reversible within the 4-week recovery period.
 - Observed kidney effects (including light hydrocarbon nephropathy and increased kidney weight) are a unique response by male rats to chronic hydrocarbon exposure, which the U.S. EPA has declared 'not relevant to humans.'
 - High-dose liver effects (including hepatocellular hypertrophy, or enlarged liver cells) are a direct consequence of the sustained high-fat 'hydrocarbon diet.'
 - The No Observed Adverse Effect Level (NOAEL) for this study was 1000 mg/kg.

Plexgel 907L-EB

SECTION XII – ECOLOGICAL INFORMATION

ENVIRONMENTAL:

- Methyl Alcohol: Dangerous to aquatic life in high concentrations. Aquatic toxicity rating: TLm 96>1000 ppm. Expected to biodegrade in soil and water very rapidly. This product will show high soil mobility and will be degraded from the ambient atmosphere by the reaction with photochemically produced hydroxyl radicals with an estimated half-life of 17.8 days, the BCF value is estimated to be 0.2.
- Petroleum Hydrotreated Light Distillate: Expected to be inherently biodegradable. The volatile constituents will oxidize rapidly by photochemical reaction in air. : Contains constituents with the potential to bioaccumulate. Floats on water: Contains volatile constituents. Evaporates within a day from water or soil surfaces. Large volumes may penetrate soil and could contaminate groundwater.

ECOTOXICITY:

- Methyl Alcohol:
 - Fish: Fathead Minnow: 29.4 g/L; 96 Hr; LC50 Fish: Goldfish: 250 ppm; 11 Hr; resulted in death; Fish: Rainbow trout: 8000 mg/L; 48 Hr; LC50 Fish: Rainbow trout: LC50 = 13-68 mg/L; 96 Hr.; 12 degrees C; Fish: Fathead Minnow: LC50 = 29400 mg/L; 96 Hr.; 25 degrees C, pH 7.63 Fish: Rainbow trout: LC50 = 8000 mg/L; 48 Hr.; Phytobacterium phosphoreum: EC50 = 51,000-320,000 mg/L; 30 minutes
- Petroleum Hydrotreated Light Distillate:
 - Toxic: LL/EL/IL₅₀ > 1 < = 10 mg/l (expressed as the nominal amount of product required to prepare aqueous test extract) Fish: Not specified: Toxic: LL/EL/IL₅₀ > 1 < = 10 mg/l; Aquatic Invertebrate: Not specified: Toxic: LL/EL/IL₅₀ > 1 < = 10 mg/l; Algae: Not specified: Toxic: LL/EL/IL₅₀ > 1 < = 10 mg/l; Microorganisms: Practically non-toxic: LL/EL/IL₅₀ > 100 mg/l; Chronic Toxicity: Fish: Not specified: NOEC/NOEL expected to be > 0.01 </= 0.1 mg/l (based on modeled data); Aquatic Invertebrates: Not specified: NOEC/NOEL expected to be > 0.01 </= 1.0 mg/l (based on test data)

SECTION XIII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

- Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility.
- Processing, use or contamination of this product may change the waste management options.
- Organic materials classified as RCRA hazardous wastes are recommended to be disposed of by thermal treatment or incineration at EPA approved facilities.
- Determination of waste classification and disposal method is the responsibility of the individual generating the waste (in accordance with 40 CFR Sections 261.21-261.24)
- Dispose of container and unused contents in accordance with federal, state and local requirements. State and local disposal regulations may differ from federal disposal regulations.

SECTION XIV – TRANSPORT INFORMATION

PROPER SHIPPING NAME:	Not DOT Regulated
HAZARD CLASS:	Not Applicable
UN NUMBER:	Not Applicable
GUIDE NUMBER:	Not Applicable
PACKAGING GROUP:	Not Applicable
RQ:	Not Applicable
DOT SHIPPING:	Not DOT Regulated

Plexgel 907L-EB

SECTION XV – REGULATORY INFORMATION

TSCA STATUS:

- All components of this product are listed on the TSCA inventory.

CERCLA:

- Methyl Alcohol: RQ 5000lbs.

CAA:

- Methyl Alcohol is listed as a hazardous air pollutant (HAP)
- This material does not contain any Class 1 Ozone depleters
- This material does not contain any Class 2 Ozone depleters

CWA:

- None of the chemicals in this product are listed as Hazardous Substances under the CWA
- None of the chemicals in this product are listed as Priority Pollutants under the CWA
- None of the chemicals in the product are listed as Toxic Pollutants under the CWA

RTECS NUMBER:

- Methyl Alcohol: PC1400000
- Petroleum Hydrotreated Light Distillate: OA5504000

SARA 302 (EHS) TPQ: None

SARA 304 (EHS) RQ:

- Methyl Alcohol: 5,000 lbs

SARA 311/312 (Classification):

- Methyl Alcohol: Fire Hazard, Immediate (acute) Health Hazard, Chronic Health Hazard
- Aliphatic Petroleum Distillate: Immediate (Acute) Health Hazard

SARA 313 Reporting Requirements: Methyl Alcohol

SECTION XVI – OTHER INFORMATION

HAZARD SYMBOLS:

- Methyl Alcohol: T (Toxic); F (Highly Flammable)
- Aliphatic Petroleum Distillate: XN: Harmful-Chemicals that may cause damage to health

RISK PHRASES:

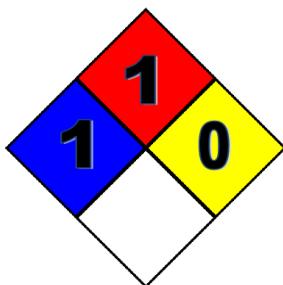
- Methyl Alcohol:
 - R 11: Highly flammable
 - R 23/24/25: Toxic by inhalation, contact with skin and if swallowed
 - R 39/23/24/25: Danger of very serious irreversible effects through inhalation, contact with skin and if swallowed
- Aliphatic Petroleum Distillate:
 - R 65: Harmful-May cause lung damage if swallowed

SAFETY PHRASES:

- Methyl Alcohol:
 - S 7: Keep container tightly closed.
 - S 16: Keep away from sources of ignition: NO SMOKING
 - S 24: Avoid contact with skin.
 - S 36: Wear suitable protective clothing.
 - S 37: Wear suitable gloves
 - S 45: In case of accident or if you feel unwell, seek medical advice immediately (show label whenever possible)
- Aliphatic Petroleum Distillate:
 - S 23: Do not breath gas/fumes/vapor/spray
 - S 24/25: Avoid contact with skin and eyes.
 - S 62: If swallowed, DO NOT induce vomiting: seek medical advice immediately and show container or label

Plexgel 907L-EB

NFPA RATING:



Exposure could cause irritation with only minor residual injury
FP >200F: Material must be preheated for ignition to occur
Normally stable, even under fire exposure conditions and not reactive with water.

HMIS:



Temporary irritation or minor reversible injury possible.
Must be preheated for ignition to occur
Normally stable, even under fire exposure conditions.
PPE: Splash Goggles, Gloves, Lab Coat, Vapor Respirator

SECTION XVII – ADDITIONAL INFORMATION

PREPARED BY: Edward F. Vinson
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EMERGENCY RESPONSE NUMBER: **800-633-8253**

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