MATERIAL SAFETY DATA SHEET

GUMOUT REGANE® COMPLETE FUEL SYSTEM CLEANER

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: GUMOUT REGANE® COMPLETE FUEL SYSTEM CLEANER **Product Use:** Gas treatment **Synonyms:** REGANE® PREMIUM GAS TREATMENT, #7727, REGANE

Company Information

SOPUS Products P.O. Box 4427 Houston, TX 77210-4427 USA Phone Numbers Medical Emergency: 1-800-546-6040 Transportation Emergency (USA): 1-800-424-9300 Transportation Emergency (International): 1-703-527-3887(Call Collect) MSDS Assistance: 1-800-546-6227 Fax On Demand: 1-800-546-6227 Technical Assistance: 1-800-458-4998 Customer Service: 1-800-468-8397 Fax Number: 713-217-3181 Internet Address: www.MSDS.PZLQS.com

2. COMPONENT INFORMATION

Component	CAS No.	Weight Percent	Hazardous
		Range	in Blend
KEROSENE	8008-20-6	60 - 70	Yes
POLYETHER AMINE	MIXTURE	30 - 40	Yes

This product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Hazards:

Flammabl	e/Co	mbustible	X	Acute Toxin X	K	Chronic Toxin	 Carcinogen	 -
Pressure		Reactive		Exposure Limit	Ξ.	Target Organ	 Other	

Other: This product contains petroleum naphthas and/or solvents which are a complex blend of light petroleum distillates.

3.HAZARDS IDENTIFICATION

Emergency and Hazards Overview DANGER: HARMFUL OR FATAL IF SWALLOWED. COMBUSTIBLE.

NFPA Ratings: Health <u>1</u> Flammability <u>2</u> Reactivity <u>0</u>

Primary Route of Exposure: Skin X Inhalation X Eye _-_

Health Effect Information

- **Eye Contact:** Avoid eye contact. This product may be slightly irritating to the eyes upon direct contact. Based on testing of similar products and/or components. Exposure to high concentrations of vapors may be irritating to the eyes.
- **Skin Contact:** Avoid skin contact. This product may cause mild to moderate skin irritation upon direct contact. Based on testing of similar products and/or components. Prolonged or repeated contact may result in contact dermatitis which is characterized by dryness, chapping, and reddening. May be absorbed through skin. See Section 11 Toxicological Information.

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- **Inhalation:** Avoid prolonged inhalation of vapors. This product may be considered a low health hazard unless inhaled in very high concentrations. Acute and chronic exposure to vapors may be irritating to the respiratory tract. Severe intoxication may lead to drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea. Exposure to even higher concentrations may lead to loss of consciousness and convulsions followed by death. At extremely high concentrations where oxygen displacement is a factor, asphyxiation may occur. See Section 11 Toxicological Information.
- **Ingestion:** Do not ingest. Ingestion of small quantities is usually nonfatal unless aspiration occurs. Aspiration may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. Severe oral intoxication will lead to intense burning of the throat and may result in drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea. Loss of consciousness and convulsions followed by death may result.
- **Medical Conditions Aggravated by Exposure:** Drying and chapping may make the skin more susceptible to other irritants, sensitizers and disease.

Other: No information available

4. FIRST AID INFORMATION

- **Eye Contact:** Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists, seek medical attention.
- **Skin Contact:** No treatment is necessary under ordinary circumstances. Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs and persists, seek medical attention. Use a hand or skin lotion to prevent dryness.
- **Inhalation:** If victim exhibits signs of vapor intoxication remove to fresh air. If discomfort persists seek medical attention. If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if it is available. If victim is unconscious, remove to fresh air and seek immediate medical attention.
- **Ingestion:** Do not induce vomiting due to aspiration hazard. If vomiting occurs lower head below knees to avoid aspiration. Seek immediate medical attention.

Notes to Physician: No information available

Other: No information available

5. FIRE AND EXPLOSION INFORMATION

Flammable Properties Flash Point: 125 F, 51.7 C Flammable Limits in Air Upper Percent: No data available Lower Percent: 0.7% Autoignition Temperature: >600 F , >315.6 C

Test Method: ASTM D-93 (P.M.C.C.)

Test Method: No information available

NFPA Classification: Class II combustible liquid

Extinguishing Media: Use water spray (fog), dry chemical, foam, or carbon dioxide.

Fire Fighting Measures

- **Special Fire Fighting Procedures and Equipment:** Water may be ineffective but can be used to cool containers exposed to heat or flame to prevent vapor pressure buildup and possible container rupture.
- **Unusual Fire and Explosion Conditions:** Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

Hazardous Combustion By-Products: None

Other: No information available

6. ACCIDENTAL RELEASE MEASURES

Personnel Safeguards: Remove all sources of ignition. Provide adequate ventilation during clean-up. Consult Health Effect Information in Section 3, Personal Protection Information in Section 8, Fire and Explosion Information in Section 5, and Stability and Reactivity Information in Section 10.

Regulatory Notifications: Notify appropriate authorities of spill.

Containment and Clean up: Contain spill immediately. Do not allow spill to enter sewers or watercourses. Absorb with solvent absorbent material. Large spills may be picked up using vacuum pumps, shovels, buckets, or other means and placed in drums or other suitable containers.

Other: No information available

7. HANDLING AND STORAGE INFORMATION

- **Handling:** Do not open or use in unventilated, enclosed or confined spaces. All ignition sources in the area should be controlled. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106--Flammable and Combustible Liquids.
- **Storage:** Do not transfer to unmarked containers. Store in a cool, well ventilated area in closed containers away from heat, sparks, open flame or oxidizing materials.

Empty Container Warnings

Drums: Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed. Empty containers retain product residue and can be dangerous. DO NOT PRESSURIZE, CUT WELD, BRAZE SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Plastic: Do not reuse this container. Empty container may retain product residues.

Other: No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION INFORMATION

Exposure Limits and Guidelines

This product does not contain any components with OSHA or ACGIH exposure limits.

Personal Protective Equipment

Eye/Face Protection: Eye protection is not required under conditions of normal use. If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles.

- **Skin Protection:** No skin protection is required for single, short duration exposures. For prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, etc.) over parts of the body subject to exposure. Launder soiled clothes.
- **Respiratory Protection:** Respiratory protection is not required under conditions of normal use. If excessive levels of mists or vapors are generated while using this product, use an organic vapor respirator. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.
- **Personal Hygiene:** Consumption of food and beverage should be avoided in work areas where hydrocarbons are present. Always wash hands and face with soap and water before eating, drinking, or smoking.

Engineering Controls / Work Practices

- **Ventilation:** If product is used in enclosed or confined spaces, adequate ventilation must be provided to prevent buildup of vapors or mists. Adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure or flammable limits. See also Fire and Explosion Information in Section 5.
- **Other:** The OSHA PEL for petroleum distillates is 2000 mg/m3. NIOSH recommended limits for petroleum distillates are 350 mg/m3 (10-hr TWA) and 1800 mg/m3 (15-min ceiling).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Amber				
Odor: Amine	Vapor Pressure: 2 mm Hg @ 68 F			
Physical state: Liquid	Vapor Density (air=1): 4.9			
pH: No data available	Percent Volatile by Volume: 65			
Boiling Point: 340 - 400 F, 171.1 - 204.4 C	Volatile Organic Content: No data available			
Melting Point: No data available	Molecular Weight: No data available			
Specific Gravity: 1.01	Average Carbon Number: No data available			
Pour Point: -80 F, -62.2 C	Viscosity @ 100 F: No data available			
	Viscosity @ 40 C: No data available			
Solubility in Water: Soluble in hydrocarbons, insoluble in water				
Octanol / Water Coefficient: Log K_{ow} = No data available				

10. STABILITY AND REACTIVITY INFORMATION

Chemical Stability: Stable

Conditions to Avoid: High heat and open flames.

Incompatible Materials to Avoid: May react with strong oxidizing agents.

Other: No information available

11. TOXICOLOGICAL INFORMATION

Primary Eye Irritation: No information available

Primary Skin Irritation: No information available

Acute Dermal Toxicity: No information available

Subacute Dermal Toxicity: No information available

Dermal Sensitization: No information available

Inhalation Toxicity: Some of are components of these blends are considered uniquely toxic at high concentrations, such as benzene (bone marrow disorders including leukemia and anemia), and n-hexane (peripheral neuropathy). However, at the low concentrations at which they may be present in the blend, and at the low exposure levels at which they may be encountered as vapors, these components do not present a significant health risk.

Inhalation Sensitization: No information available

Oral Toxicity: No information available

Mutagenicity: No information available

Carcinogenicity: Light hydrocarbons such as stoddard solvent, VM & P naphtha and C10-C11 isoparaffins have produced kidney damage in male rats, but not in female rats or mice. The Environmental Protection Agency (EPA) has concluded that rat kidney damage and tumors induced by light petroleum hydrocarbons are not relevant to humans. Various naphthas tested were not carcinogenic in mouse skin painting studies conducted by the American Petroleum Institute (API). The International Agency for Research on Cancer (IARC) has concluded that petroleum solvents are Group 3 substances, "not classifiable as to their carcinogenicity to humans".

Reproductive and Developmental Toxicity: No information available

Teratogenicity: No information available

Immunotoxicity: No information available

Neurotoxicity: No information available

Other: No information available

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: No information available

Terrestrial Toxicity: No information available

Chemical Fate and Transport: No information available

Other: No information available

13. DISPOSAL INFORMATION

- **Regulatory Information:** All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded, may be a RCRA waste. Caution! If regulated solvents are used to clean up spilled material, the resulting waste mixture may be regulated. The material, if spilled or discarded, may be a regulated waste. Department of Transportation (DOT) regulations may apply for transporting this material when spilled.
- **Waste Disposal Methods:** Waste material may be landfilled or incinerated at an approved facility. Materials should be recycled if possible.

Other: No information available

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT) Highway / Rail (Bulk): Not Regulated Highway / Rail (Non-Bulk): CONSUMER COMMODITY, ORM-D

For US shipments, US DOT law requires the shipper to determine the proper shipping description of the material that is being shipped. The shipping information and description contained in this section may not be suitable for all shipments of this material, but may help the shipper determine the proper shipping description for a particular shipment.

International Information

Vessel:	IMDG Regulated:	Х	IMDG Not Regulated:	
Air:	ICAO Regulated:	X	ICAO Not Regulated:	

Other: No information available

15. Regulatory Information

<u>Regulatory Lists Searched</u>: The components listed in Section 2 of this MSDS were compared to substances that appear on the following regulatory lists. Each list is numerically identified. See Regulatory Search Results below.

Health & Safety: 10 - IARC carcinogen, 11 - NTP carcinogen, 12 - OSHA carcinogen, 15 - ACGIH TLV, 16 - OSHA PEL, 17 - NIOSH exposure limit, 20 - US DOT Appendix A, Hazardous substances, 22 - FDA 21 CFR Total food additives, 23 - NFPA 49 or 325

Environmental: 30 - CAA 1990 Hazardous air pollutants, 31 - CAA Ozone depletors, 33 - CAA HON rule, 34 - CAA Toxic substance for accidental release prevention, 35 - CAA Volatile organic compounds (VOC's) in SOCMI, 41 - CERCLA / SARA Section 302 extremely hazardous substances, 42 - CERCLA / SARA Section 313 emissions reporting, 43 - CWA Hazardous substances, 44 - CWA Priority pollutants, 45 - CWA Toxic pollutants, 46 - EPA Proposed test rule for hazardous air pollutants, 47 - RCRA Basis for listing - Appendix VII, 48 - RCRA waste, 49 - SDWA - (S)MCLs

International: 50 - Canada - WHMIS Classification of substance, 54 - Mexico - Drinking water - ecological criteria, 55 - Mexico - Wastewater discharges, 56 - US -TSCA Section (12)(b) - export notification

State Lists: 60 - CA - Proposition 65, 61 - FL - Substances, 62 - MI - Critical materials, 63 - MA - RTK, 64 - MA - Extraordinarily hazardous substances, 65 - MN - Hazardous substances, 66 - PA - RTK, 67 - NJ - RTK, 68 - NJ - Environmental hazardous substances, 69 - NJ - Special hazardous substances

Inventories: 80 - Canada - Domestic substances, 81 - European - EINECS, 82 - Japan - ENCS, 83 - Korea - Existing and evaluated chemical substances, 84 - US - TSCA , 85 - China Inventory

Regulatory Search Results:

KEROSENE: 17, 23, 50, 61, 63, 66, 67, 68, 69, 80, 81, 83, 84, 85

U.S. TSCA Inventory: All components of this material are on the US TSCA Inventory.

SARA Section 313: Consumer products are not regulated under SARA, Title III, Section 313.

IARC: No information available

SARA 311 / 312 Categories

Acute: X Chronic: -- Fire: X Pressure: -- Reactive: --Not Regulated: --

Canadian WHMIS Classification

Class B - Flammable and Combustible Material, Division 3, Combustible Liquid Class D - Poisonous and infectious material, Division 2B, Toxic Material

European Union Classification

Hazard Symbols:

Harmful / Xn / X in square.

Dangerous for the environment / N / dead tree and fish in square

Risk Phrases:

R10: Flammable.
R65: Harmful: may cause lung damage if swallowed.
R66: Repeated exposure may cause skin dryness or cracking.
R67: Vapours may cause drowsiness and dizziness.
Safety Phrases:
S2: Keep out of the reach of Children.
S23: Do not breathe gas/fumes/vapour/spray.
S24: Avoid contact with skin.
S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this

container or label.

Other: No information available

16. OTHER INFORMATION

Health and Environmental Label Language

Front Label: DANGER: HARMFUL OR FATAL IF SWALLOWED. COMBUSTIBLE. Read carefully other cautions on back.

Back Label: DANGER: Contains petroleum distillates. Prolonged and repeated skin contact may cause drying of skin.

PRECAUTIONARY MEASURES: Keep away from heat and flames. Avoid breathing of mists and vapors. Use only in well ventilated areas. Keep container closed. Avoid skin and eye contact. Wash thoroughly after handling.

FIRST AID: If swallowed, do not induce vomiting. Call physician immediately. If inhaled, breathe fresh air. For contact with skin or eyes wash thoroughly with water.

KEEP OUT OF REACH OF CHILDREN.

MSDS Revisions

Previous Version Date: 9/6/2002

Previous Version Information

Section 5. Fire and Explosion Information Section 14. Transportation Information

Other

MATERIAL SAFETY DATA SHEET GUMOUT REGANE® COMPLETE FUEL SYSTEM CLEANER

No information available

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