

MATERIAL SAFETY DATA SHEET

REGANE® COMPLETE FUEL SYSTEM CLEANER

1. PRODUCT AND COMPANY IDENTIFICATION

MSDS Number: 620

Version Date: 9/6/2002

Product Name: REGANE® COMPLETE FUEL SYSTEM CLEANER

Product Use: No information available

Synonyms: REGANE® PREMIUM GAS TREATMENT, #7727, REGANE

Manufacturer

Pennzoil-Quaker State Company
P.O. Box 2967
Houston, TX 77252-2967
USA

Phone Numbers

Medical Emergency: 1-800-546-6040
Transportation Emergency (USA): 1-800-535-5053
Transportation Emergency (International):
1-352-323-3500 (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 Range	Hazardous in Blend
KEROSENE	8008-20-6	60 - 70	Yes
POLYETHER AMINE	MIXTURE	30 - 40	Yes

This product is **HAZARDOUS** according to OSHA 29 CFR 1910.1200.

Hazards:

Flammable/Combustible **Acute Toxin** **Chronic Toxin** **Carcinogen**
Pressure **Reactive** **Exposure Limit** **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 1 Flammability 2 Reactivity 0

Primary Route of Exposure: Skin Inhalation 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.

MATERIAL SAFETY DATA SHEET

MSDS Number: 620

REGANE® COMPLETE FUEL SYSTEM CLEANER

Page 2 of 8

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: 110 F, 43.3 C

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

Flash Point: No data available

Test Method: No information available

Flammable Limits in Air

Upper Percent: No data available

Lower Percent: 0.7%

Autoignition Temperature: >600 F , >315.6 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.

MATERIAL SAFETY DATA SHEET

MSDS Number: 620

REGANE® COMPLETE FUEL SYSTEM CLEANER

Page 4 of 8

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

MATERIAL SAFETY DATA SHEET

MSDS Number: 620

REGANE® COMPLETE FUEL SYSTEM CLEANER

Page 5 of 8

Dermal Sensitization: No information available

Inhalation Toxicity: Some of the 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

MATERIAL SAFETY DATA SHEET

MSDS Number: 620

REGANE® COMPLETE FUEL SYSTEM CLEANER

Page 6 of 8

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Highway / Rail (Bulk): Petroleum distillates, n.o.s., 3, UN1268, III

Highway / Rail (Non-Bulk): NOT APPLICABLE

The DOT description is provided to assist in the proper shipping classification of this product and may not be suitable for all shipping descriptions.

International Information

Vessel: IMDG Regulated: X **IMDG Not Regulated:**

Air: ICAO Regulated: X **ICAO Not Regulated:**

Other: No information available

15. Regulatory Information

Regulatory Lists Searched: 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 depleters, 33 - CAA HON rule, 34 - CAA Toxic substance for accidental release prevention, 35 - CAA Volatile organic compounds (VOC's) in SO2MI, 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

MATERIAL SAFETY DATA SHEET

MSDS Number: 620

REGANE® COMPLETE FUEL SYSTEM CLEANER

Page 7 of 8

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, sparks, flame and other ignition sources. 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 skin or eye contact, wash thoroughly with water.

KEEP OUT OF REACH OF CHILDREN.

MSDS Revisions

Previous Version Date: 9/6/2002

Previous Version Information

All sections revised, new 16 section MSDS format.

Section 14 - Transportation Information Revised.

MATERIAL SAFETY DATA SHEET
REGANE® COMPLETE FUEL SYSTEM CLEANER

MSDS Number: 620

Page 8 of 8

Other

No information available

Prepared By:

Pennzoil-Quaker State Company
Environmental, Safety, Health, & DOT Compliance
P.O. Box 2967
Houston, TX 77252-2967 USA

Disclaimer of Warranty: The information contained herein is based upon data and information available to us, and reflects our best professional judgement. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Pennzoil-Quaker State Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent. Since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.