

MATERIAL SAFETY DATA SHEET

PENNZOIL® Z-4™ MULTI-PURPOSE LUBRICANT

1. PRODUCT AND COMPANY IDENTIFICATION

MSDS Number: 1019

Version Date: 10/30/02

Product Name: PENNZOIL® Z-4™ MULTI-PURPOSE LUBRICANT

Product Use: Lubricant

Synonyms: PENNZGUARD® (AEROSOL CANS), STOCK #1115, STOCK #1116

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 Range	Hazardous in Blend
HYDROTREATED LIGHT DISTILLATE	64742-47-8	55 - 65	Yes
HEAVY PARAFFINIC SOLVENT DEWAXED DISTILLATES	64742-65-0	15 - 20	No
CORROSION INHIBITOR	MIXTURE	1 - 10	No
VANILLIN FRAGRANCE	MIXTURE	< 1	No
PROPANE/BUTANE PROPELLANT	MIXTURE	10 - 20	Yes

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

Hazards:

Flammable/Combustible X **Acute Toxin** X **Chronic Toxin** X **Carcinogen** --
Pressure X **Reactive** -- **Exposure Limit** X **Target Organ** -- **Other** --

Other: This product contains a blend of base lubricating oils and petroleum naphthas and/or solvents.

3. HAZARDS IDENTIFICATION

Emergency and Hazards Overview

DANGER: EXTREMELY FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED. CONTENTS UNDER PRESSURE.

NFPA Ratings: Health 1 Flammability 3 Reactivity 0

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

Health Effect Information

Eye Contact: Avoid eye contact. This product has not been tested for acute eye hazards. May be irritating to the eyes upon direct contact. Exposure to mists and vapors may be irritating to the eyes. These effects are transient, and complete recovery follows.

Skin Contact: This product may cause slight skin irritation upon direct contact. Prolonged or repeated skin contact may result in dryness, chapping, and reddening.

MATERIAL SAFETY DATA SHEET

MSDS Number: 1019

PENNZOIL® Z-4™ MULTI-PURPOSE LUBRICANT

Page 2 of 7

Inhalation: This product is not expected to pose an inhalation hazard under conditions of foreseeable use. Caution should be taken to minimize exposure to aerosols/mists of this product. Acute and chronic overexposures may be irritating to the respiratory tract. Inhalation of high concentrations of this product can cause central nervous system depression and narcosis. Severe intoxication may lead to drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea. While affected, the ability to perform skilled tasks is compromised. Exposure to extremely high concentrations may have anesthetic effects. Intentional misuse by deliberately concentrating and inhaling this product can be harmful or fatal.

Ingestion: Not applicable by this route of exposure. Ingestion is unlikely for aerosol products.

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 for 15 minutes or until irritation subsides. If irritation persists, seek medical attention.

Skin Contact: Wash contaminated area thoroughly with soap and water. Use a hand or skin lotion to prevent dryness. If redness or irritation occurs and persists, seek medical attention.

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: Ingestion is unlikely for aerosol products. Accidental spraying into the mouth will not result in any harmful effects. No treatment is necessary under ordinary circumstances.

Notes to Physician: No information available

Other: No information available

5. FIRE AND EXPLOSION INFORMATION

Flammable Properties

Flash Point (aerosol concentrate): No data available

Test Method: No information available

Flash Point (aerosol concentrate): No data available

Test Method:

Flame Extension: > 18", with flashback

Test Method: CPSC 1500.45

Flammable Limits in Air

Upper Percent: No data available

Lower Percent: No data available

Autoignition Temperature: No data available

Test Method: No information available

NFPA Classification: Level 3 Aerosol (NFPA 30B)

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.

MATERIAL SAFETY DATA SHEET

MSDS Number: 1019

PENNZOIL® Z-4™ MULTI-PURPOSE LUBRICANT

Page 3 of 7

Unusual Fire and Explosion Conditions: DANGER! Contents are under pressure and can explode when exposed to heat or flames. Dense smoke may be generated while burning.

Hazardous Combustion By-Products: Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

Other: No information available

6. ACCIDENTAL RELEASE MEASURES

Personnel Safeguards: Remove all sources of ignition. Provide adequate ventilation to remove vapors and mists. 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: No notification required

Containment and Clean up: No special cleanup procedures are necessary.

Other: No information available

7. HANDLING AND STORAGE INFORMATION

Handling: All ignition sources in the area should be controlled. See NFPA 30B, Code for the Manufacture and Storage of Aerosol Products. Contents under pressure and can explode when exposed to heat or open flame. DANGER! Do not puncture or incinerate.

Storage: Do not store at temperatures greater than 120 F.

Empty Container Warnings

Drums: Not applicable

Plastic: Not applicable

Other: For products used under the automobile hood, KEEP AWAY FROM BATTERY TERMINALS.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION INFORMATION

Exposure Limits and Guidelines

Component	CAS No.	Exposure Limit
PROPANE/BUTANE PROPELLANT	MIXTURE	ACGIH - TLV: TWA 800 ppm

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 sprayed into eyes, wear plastic face shield or splash-proof safety goggles.

Skin Protection: Skin protection is not required under conditions of normal use. 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. See Section 3, Health Effect Information, Inhalation.

Personal Hygiene: Consumption of food and beverage should be avoided in work areas where this product is present. Always wash hands and face with soap and water before eating, drinking, or smoking.

MATERIAL SAFETY DATA SHEET

MSDS Number: 1019

PENNZOIL® Z-4™ MULTI-PURPOSE LUBRICANT

Page 4 of 7

Engineering Controls / Work Practices

Ventilation: Adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure or flammable limits. Providing adequate ventilation to keep exposure levels below the permissible exposure limits or flammability limits will prevent any physiological effects.

If possible, use product outdoors, preferably upwind, to prevent eye and/or respiratory tract irritation.

Other: No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear , transparent film	
Odor: Petroleum	Vapor Pressure: 1 mm Hg @ 68 F
Physical state: Aerosol	Vapor Density (air=1): No data available
pH: No data available	Percent Volatile by Volume: No data available
Boiling Point: Not applicable	Volatile Organic Content: Apx 50
Melting Point: Not applicable	Molecular Weight: No data available
Specific Gravity: Not applicable	Average Carbon Number: No data available
Pour Point: No data available	Viscosity @ 100 F: No data available
	Viscosity @ 40 C: No data available
Solubility in Water: Insoluble in water, soluble in hydrocarbons	
Octanol / Water Coefficient: Log K_{ow} = No data available	

10. STABILITY AND REACTIVITY INFORMATION

Chemical Stability: Stable

Conditions to Avoid: Keep away from heat, sparks, open flames and other ignition sources.

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: No information available

Inhalation Sensitization: No information available

Oral Toxicity: No information available

Mutagenicity: No information available

Carcinogenicity: No information available

MATERIAL SAFETY DATA SHEET

MSDS Number: 1019

PENNZOIL® Z-4™ MULTI-PURPOSE LUBRICANT

Page 5 of 7

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: Dispose of residual products and empty containers responsibly.

Waste Disposal Methods: Waste material may be landfilled or incinerated at an approved facility.

Other: No information available

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Highway / Rail (Bulk): NOT APPLICABLE

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: 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

MATERIAL SAFETY DATA SHEET

MSDS Number: 1019

PENNZOIL® Z-4™ MULTI-PURPOSE LUBRICANT

Page 6 of 7

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 SOCOMI, 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:

HEAVY PARAFFINIC SOLVENT DEWAXED DISTILLATES: 80, 81, 83, 84, 85

HYDROTREATED LIGHT DISTILLATE: 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:** X **Fire:** X **Pressure:** X **Reactive:** --

Not Regulated: --

Canadian WHMIS Classification

Class B - Flammable and Combustible Material, Division 5, Flammable Aerosols

Class D - Poisonous and infectious material, Division 2B, Toxic Material

European Union Classification

Hazard Symbols:

"3" Aerosol

Harmful / Xn / X in square.

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

Risk Phrases:

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

R51/53: Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

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: EXTREMELY FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED.
CONTENTS UNDER PRESSURE.
Read carefully other cautions on back.

Back Label:

DANGER: Contains hydrocarbon solvents. Prolonged and repeated skin contact may cause drying of skin.

PRECAUTIONARY MEASURES: Do not puncture, incinerate or store above 120 F. Avoid prolonged exposure to sunlight. Keep away from heat, sparks, flames and other ignition sources. Exposure to heat may cause can to burst. Avoid breathing of mists and vapors. Use only in well ventilated areas. Avoid skin and eye contact. Wash thoroughly after handling.

FIRST AID: If swallowed, do not induce vomiting. Call physician immediately. For eye contact, wash thoroughly with water. If inhaled, breathe fresh air. If not breathing, give artificial respiration. Call physician immediately. Use only as directed. Intentional misuse by deliberately concentrating and/or inhaling can be harmful or fatal.

KEEP OUT OF REACH OF CHILDREN.

Note: For automotive products used near engine, add on top of back panel: Keep away from battery terminals.

MSDS Revisions

Previous Version Date: 09/06/02

Previous Version Information

Section 2 - Revised Component Information.

Other

No information available

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