MATERIAL SAFETY DATA SHEET

EQUILON MSDS: 00659ET 02/24/99

CANOPUS 68 Premium Vacuum Pump Oil

TELEPHONE NUMBER:

24 HOUR EMERGENCY ASSISTANCE GENERAL MSDS ASSISTANCE EQUIVA SERVICES: 877-276-7283 877-276-7285 CHEMTREC: 800-424-9300

Sold By: DiversiTech 2530 Lantrac Court Decatur, GA 30035

LEGEND:

N.D. - NOT DETERMINED N.A. - NOT APPLICABLE N.T- NOT TESTED < - LESS THAN > - GREATER THAN

<u>1. NAME</u>

MATERIAL IDENTITY Product Code and Name: 00659 <u>CANOPUS 68</u> Chemical Name and/or Family or Description: Paraffin Pale Oils

2. COMPOSITION/INFORMATION ON INGREDIENTS

THE CRITERIA FOR LISTING COMPONENTS IN THE COMPOSITION SECTION IS AS FOLLOWS: CARCINOGENS ARE LISTED WHEN PRESENT AT 0.1 % OR GREATER; COMPONENTS WHICH ARE OTHERWISE HAZARDOUS ACCORDING TO OSHA ARE LISTED WHEN PRESENT AT 1.0 % OR GREATER; NON-HAZARDOUS COMPONENTS ARE LISTED AT 3.0 % OR GREATER. THIS IS NOT INTENDED TO BE A COMPLETE COMPOSITIONAL DISCLOSURE. REFER TO SECTION 14 FOR APPLICABLE STATES' RIGHT TO KNOW AND OTHER REGULATORY INFORMATION. Product and/or Component(s) Carcinogenic According to:

Product and/or Component(s) Carcinogenic According to: OSHA IARC NTP OTHER NONE X

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Composition: (Sequence Number and Chemical Name Seq. Chemical Name CAS Number Range in %

01 # Hydrotreated heavy paraffinic petroleum 64742-54-7 100.00 distillates

MINERAL OIL MIST HAS A PERMISSIBLE EXPOSURE LIMIT (PEL); THEREFORE, THIS PRODUCT, BY DEFINITION, IS CONSIDERED HAZARDOUS BY OSHA (1910.1200). # COMPONENT, BY DEFINITION, IS CONSIDERED HAZARDOUS ACCORDING TO OSHA BECAUSE IT CARRIES THE PERMISSIBLE EXPOSURE LIMIT (PEL) FOR MINERAL OIL MIST.

Exposure Limits referenced by Sequence Number in the Composition Section Seq. Limit

01 5 mg/m3 TWA-OSHA (MINERAL OIL MIST) 01 5 mg/m3 TWA-ACGIH (MINERAL OIL MIST) 01 10 mg/m3 STEL ACGIH (MINERAL OIL MIST)

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW Appearance: Bright and clear liquid Odor: Petroleum oil odor

WARNING STATEMENT

CAUTION ! OIL MIST MAY CAUSE RESPIRATORY IRRITATION

HMIS NFPA

Health: 1 Reactivity: 0 Health: 1 Reactivity: 0
Flammability: 1 Special : - Flammability: 1 Special : -

POTENTIAL HEALTH EFFECTS

EYE SKIN INHALATION INGESTION Primary Route of Exposure: X X X

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EFFECTS OF OVEREXPOSURE Acute: Eves:

May cause minimal irritation, experienced as temporary discomfort.

Skin:

Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seen as local redness and swelling.

Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects.

Inhalation:

Vapors or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness.

Ingestion:

If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.

Sensitization Properties:

Unknown.

Chronic:

No adverse effects have been documented in humans as a result of chronic exposure. Section 11 may contain applicable animal data.

Medical Conditions Aggravated by Exposure:

Because of its irritating properties, repeated skin contact may aggravate

an existing dermatitis (skin condition).

Other Remarks:

None

4. FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for several minutes. Get medical attention if eye irritation persists.

Skin:

Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

Ingestion:

If more than several mouthfuls of this material are swallowed, give two glasses of water (16 oz.). Get medical attention.

Inhalation:

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

Other Instructions:

Remove and dry-clean or launder clothing soaked or soiled with this material before reuse. Dry cleaning of contaminated clothing may be more effective than normal laundering. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated

clothing.

5. FIRE-FIGHTING MEASURES

Ignition Temperature-AIT (degrees F):

Not determined. Flash Point (degrees F): 425 (COC) Flammable Limits (%): Lower: Not determined. Upper: Not determined.

Recommended Fire Extinguishing Agents And Special Procedures:

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:

None

Special Protective Equipment for Firefighters:

Wear full protective clothing and positive pressure breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills : CHEMTREC (800) 424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:

Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up.

Prevent entry into sewers and waterways. Avoid contact with skin, eyes or

clothing.

7. HANDLING AND STORAGE

Precautions to be Taken in Handling: Minimum feasible handling temperatures should be maintained.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

Skin Protection:

Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be laundered or dry-cleaned.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of

the

product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Adequate to meet occupational exposure limits (see below).

Exposure Limit for Total Product:

Mineral oil mist: OSHA PEL-TWA 5 mg/m3; ACGIH TLV-TWA 5 mg/m3.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Bright and clear liquid Odor: Petroleum oil odor

Boiling Point (degrees F):

Not determined.

Melting/Freezing point (degrees F):

Not applicable.

Specific Gravity (water=1):
.8816

pH of undiluted product: Not applicable.

Vapor Pressure:

Not determined.

Viscosity:

64 cSt at 40.0 C

VOC Content: Not determined.

Vapor Density (air=1):
Not determined.

Solubility in Water (%): Not determined.

Other: None

10. STABILITY AND REACTIVITY

This Material Reacts Violently With: (If Others is checked below, see comments for details) Air Water Heat Strong Oxidizers Others None of These X

Comments: None

Products Evolved When Subjected to Heat or Combustion:

Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones, and combustion products or compounds of nitrogen, sulfur.

Hazardous Polymerizations: DO NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA) Median Lethal Dose Oral: LD50 Similar product > 5.00 g/kg (rat) practically non-toxic Inhalation: 4 hr. LC50 Similar product > 2.08 mg/liter (dust, mist, fume) (rat) practically non-toxic Dermal: LD50 Similar product > 2.00 g/kg (rabbit) practically non-toxic Irritation Index, Estimation of Irritation (Species) Skin: (Draize) Similar product .79 /8.0 (rabbit) slightly irritating Eyes: (Draize) Similar product 5.70 /110 (rabbit) no appreciable effect Sensitization: (Buehler) Similar product Negative - skin (guinea pig) Other: None

12. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks

None

13. TRANSPORT INFORMATION

Transportation DOT: Proper Shipping Name: Not regulated

IMDG:

Proper Shipping Name: Not regulated

ICAO:

Proper Shipping Name: Not regulated

TDG: Proper Shipping Name: Not regulated

14. REGULATORY INFORMATION

Federal Regulations: SARA Title III: Section 302/304 Extremely Hazardous Substances Seq. Chemical Name CAS Number Range in %

None

Section 302/304 Extremely Hazardous Substances (CONT) Seq. TPQ RQ

None

Section 311 Hazardous Categorization:

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Acute Chronic Fire Pressure Reactive N/A X

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Section 313 Toxic Chemical Chemical Name CAS Number Concentration

None

CERCLA 102(a)/DOT Hazardous Substances: (+ indicates DOT Hazardous Substance)

Seq. Chemical Name CAS Number Range in %

None

<code>CERCLA/DOT Hazardous Substances (Sequence Numbers and RQ's): Seq. RQ</code>

None

TSCA Inventory Status:

This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Other:

None.

State Regulations:

California Proposition 65: The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity. Chemical Name CAS Number None

International Regulations:

WHMIS Classification:

Not controlled

Canada Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Australia Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status:

This product, or its components, are listed on or are exempt from the Japanese Ministry of International Trade and Industry (MITI) inventory.

15. ENVIRONMENTAL INFORMATION

Aquatic Toxicity: Not determined.

Mobility:

Not determined.

Persistence and Biodegradability:

This product is reported to have a moderate (>= 30%) rate of biodegradation in a test for ready biodegradation.

Potential to Bioaccumulate:

This product is estimated to have a high potential to bioconcentrate.

Remarks: None

16. OTHER INFORMATION

None

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT FOR PURPOSE OF HAZARD COMMUNICATION AS PART OF THE PRODUCT SAFETY PROGRAM. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN. DATA SHEETS ARE AVAILABLE FOR ALL PRODUCTS. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE AND YOU ARE ENCOURAGED AND REQUESTED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, USER SHOULD CONSULT HIS LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. WE WILL NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.

Date: 1999-02-24 New X Revised, Supersedes: 1999-01-26

Inquiries regarding MSDS should be directed to: Equiva Services LLC Manager Product Stewardship P.O. Box 674414 Houston, TX 77267-4414

17. PRODUCT LABEL

READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT. THIS LABEL COMPLIES WITH THE REQUIREMENTS OF THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) FOR USE IN THE WORKPLACE. THIS LABEL IS NOT INTENDED TO BE USED WITH PACKAGING INTENDED FOR SALE TO CONSUMERS AND MAY NOT CONFORM WITH THE REQUIREMENTS OF THE CONSUMER PRODUCT SAFETY ACT OR OTHER RELATED REGULATORY REQUIREMENTS.

00659 CANOPUS 68 WARNING STATEMENT

CAUTION ! OIL MIST MAY CAUSE RESPIRATORY IRRITATION

PRECAUTIONARY MEASURES

-Avoid prolonged breathing of vapor, mist, or gas. -Workers should wash exposed skin several times daily with soap and water. FIRST AID

Eye Contact:

Flush eyes with plenty of water for several minutes. Get medical attention if eye irritation persists. Skin Contact: Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists. Ingestion: If more than several mouthfuls of this material are swallowed, give two glasses of water (16 oz.). Get medical attention. Inhalation: If irritation, headache, nausea, or drowsiness occurs, remove to fresh

air. Get medical attention if breathing becomes difficult or respiratory irritation persists. Note to Physician: None FIRE In case of fire, use water spray, dry chemical, foam or carbon dioxide. Water may cause frothing. Use water spray to cool fire-exposed containers. Chemical Name CAS Number Range in % # Hydrotreated heavy paraffinic petroleum 64742-54-7 100.00 distillates MINERAL OIL MIST HAS A PERMISSIBLE EXPOSURE LIMIT (PEL); THEREFORE, THIS PRODUCT, BY DEFINITION, IS CONSIDERED HAZARDOUS BY OSHA (1910.1200). # COMPONENT, BY DEFINITION, IS CONSIDERED HAZARDOUS ACCORDING TO OSHA BECAUSE IT CARRIES THE PERMISSIBLE EXPOSURE LIMIT (PEL) FOR MINERAL OIL MIST. HMIS NFPA Health: 1 Reactivity: 0 Health: 1 Reactivity: 0 Flammability: 1 Special : - Flammability: 1 Special : -Transportation DOT: Proper Shipping Name: Not regulated CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place. Name and Address: Equilon Enterprises LLC P.O. Box 674414 Houston ,TX 77267-4414 TRANSPORTATION EMERGENCY: (877)276-7283 CHEMTREC: (800) 424-9300

HEALTH EMERGENCY: (877)276-7283