

MASTER COPY

MSDS NO.

0182

===== CHEMICAL PRODUCT AND COMPANY IDENTIFICATION =====

TRADE NAME: ENERGOL JS-A
CAS NUMBER: Mixture
SYNONYM(S): ELECTRICAL INSULATING OIL; TRANSFORMER OIL;
PETROLEUM HYDROCARBON
MSDS NUMBER: 2155
PRODUCT CODE: P 3799
HIERARCHY: 050.060
MANUFACTURER/SUPPLIER: BP Marine Americas

ADDRESS: P.O. Box 4518, Houston, TX 77210-4518
TELEPHONE NUMBERS - 24 HOUR EMERGENCY ASSISTANCE:
BP America (In Ohio): 800-362-8059
BP America (Outside Ohio): 800-321-8642
CHEMTREC ASSISTANCE: 800-424-9300
TELEPHONE NUMBERS - GENERAL ASSISTANCE: (Normal Office Hours):
(8:00-4:30 M-F, EST):
Technical: 713-560-3836
MSDS Contact: 216-586-8023



received
10-27-98 RS

===== COMPOSITION/INFORMATION ON INGREDIENTS =====

COMPONENT: Hydrotreated Distillate, Light Naphthenic
CAS NO.: 64742-53-6
% BY WT.: 99.9 - 100
EXPOSURE LIMITS:
5 mg/m³ TLV ACGIH for oil mist, mineral
10 mg/m³ STEL ACGIH for oil mist, mineral
5 mg/m³ PEL OSHA for oil mist, mineral
5 mg/m³ REL NIOSH for oil mist, mineral
10 mg/m³ STEL NIOSH for oil mist, mineral
5 mg/m³ TWA MEXICAN for oil mist, mineral
10 mg/m³ STC MEXICAN for oil mist, mineral

The OSHA Permissible Exposure Limits listed above were promulgated by OSHA in 1989. This standard was vacated by the U.S. Court of Appeals for the Eleventh Circuit. Exposure limits defined in specific chemical standards found in 29 CFR 1910.1000-1048 are not covered by this ruling and are still enforceable.

===== HAZARDS IDENTIFICATION =====

EMERGENCY OVERVIEW:

Colorless, Clear Liquid with a Hydrocarbon Odor.

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Danger!
Aspiration Hazard If Swallowed--Can Enter Lungs and Cause Damage.
- May Be Irritating To the Skin, Eyes and Respiratory Tract.

POTENTIAL HEALTH EFFECTS:

SKIN:

Repeated or prolonged contact may result in defatting, redness, itching, inflammation, cracking and possible secondary infection. Contact with heated material may cause thermal burns.

EYE:

May cause slight irritation. Contact with heated material may cause thermal burns.

INHALATION:

May cause respiratory tract irritation. Exposure to high concentrations of dense oil mists may lead to oil pneumonia.

INGESTION:

Aspiration into lungs may cause pneumonitis. May cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting and diarrhea.

SPECIAL TOXIC EFFECTS:

This product contains a severely hydrotreated distillate. IARC has determined for severely hydrotreated oils that there is inadequate evidence to permit an evaluation of the carcinogenicity to experimental animals.

This product also contains a hydrotreated middle distillate.

See Section FIRST AID MEASURES - for Medical Conditions Aggravated By Exposure.

===== FIRST AID MEASURES =====

SKIN:

Remove contaminated clothing immediately. Wash area of contact thoroughly with soap and water. Get medical attention if irritation persists. Thermal burns require immediate medical attention.

EYE:

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Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists. Thermal burns require immediate medical attention.

INHALATION:

Remove affected person from source of exposure. Get medical attention if irritation persists.

INGESTION:

Do not induce vomiting because of danger of aspirating liquid into lungs. If spontaneous vomiting occurs, monitor for breathing difficulty. Get immediate medical attention.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing medical conditions may be aggravated by exposure.

NOTES TO PHYSICIAN:

Aspiration of low viscosity petroleum hydrocarbons may cause severe pneumonitis (oil pneumonia). Vomiting should not be induced. In unconscious victims, use of an endotracheal tube should be considered, if gastric lavage is undertaken.

===== **FIREFIGHTING MEASURES** =====

FLASH POINT: 140 C (284 F) PMCC
AUTOIGNITION TEMPERATURE: ND
FLAMMABILITY LIMITS IN AIR (% BY VOL.) LOWER: NA
FLAMMABILITY LIMITS IN AIR (% BY VOL.) UPPER: NA

HAZARDOUS COMBUSTION PRODUCTS:

Combustion may produce CO, CO2 and reactive hydrocarbons.

BASIC FIRE FIGHTING PROCEDURES:

Use water spray, dry chemical, foam or carbon dioxide to extinguish fire. Water or foam may cause frothing, with further application leading to boilover. Use water spray to cool fire-exposed containers, structures and to protect personnel. Use water to flush spills away from sources of ignition. Do not flush down public sewers or other drainage systems. Exposed firefighters must wear MSHA/NIOSH approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

UNUSUAL FIRE & EXPLOSION HAZARDS:

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Combustible at high temperatures. Irritating and/or toxic substances may be emitted upon thermal decomposition.

===== ACCIDENTAL RELEASE MEASURES =====

If your facility or operation has an "Oil or Hazardous Substance Contingency Plan", activate its procedures. Take immediate steps to stop and contain the spill. Caution should be exercised regarding personnel safety and exposure to the spilled material. For technical advice and assistance related to chemicals, contact CHEMTREC (800/424-9300) and your local fire department. Notify the National Response Center, if required. Also notify appropriate state and local regulatory agencies, the LEPC and the SERC. Contact the local Coast Guard if the release is into a waterway.

Keep unnecessary people away. Keep ignition sources out of area. Stop leak if you can do it without risk. Small Spills: Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Large Spills: Dike far ahead of liquid spill for later disposal.

During an accidental release, personal protection equipment may be required (see Section EXPOSURE CONTROLS/PERSONAL PROTECTION). Additional regulatory requirements may apply (see Section REGULATORY INFORMATION).

===== HANDLING AND STORAGE =====

HANDLING:

Do not eat, drink or smoke in areas of use or storage. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Remove contaminated clothing and clean before reuse. Wash thoroughly after work using soap and water.

Empty containers may contain toxic, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose containers unless adequate precautions are taken against these hazards.

STORAGE:

Avoid extremes of temperature in storage. Store in tightly closed containers in cool, dry, isolated, well-ventilated area away from heat, sources of ignition and incompatibles. Do not store in unlabeled containers.

===== EXPOSURE CONTROLS / PERSONAL PROTECTION =====

ENGINEERING CONTROLS:

Ventilation and other forms of engineering controls are often the preferred means for controlling chemical exposures.

PERSONAL PROTECTION EQUIPMENT (PPE):

EYE PROTECTION:

Avoid eye contact with this material. Wear safety glasses or chemical goggles. Provide an eyewash station immediately accessible to the work area. Do not wear contact lenses when working with this substance.

SKIN PROTECTION:

Avoid skin contact. When working with this substance, wear appropriate chemical protective gloves. Depending upon conditions of use, additional protection may be necessary such as face shield, apron, armcovers, etc.

RESPIRATORY PROTECTION:

If exposure limits are exceeded or if irritation is experienced, NIOSH approved respiratory protection should be worn. Respiratory protection may be needed for non-routine or emergency situations.

See Section COMPOSITION/INFORMATION ON INGREDIENTS For Exposure Guidelines.

===== PHYSICAL AND CHEMICAL PROPERTIES =====

BOILING POINT:	> 287.7778 C (550 F)
SP. GRAVITY (Water=1):	0.895 @ 15.5556 C (60 F)
MELTING POINT:	ND
% VOLATILE:	ND
VAPOR PRESSURE:	< 0.1 MM HG
EVAPORATION RATE:	ND
VAPOR DENSITY (Air=1):	ND
VISCOSITY:	61.3 SUS @ 37.7778 C (100 F)
% SOLUBILITY IN WATER:	Negligible
OCTANOL/WATER PARTITION COEFFICIENT:	ND
POUR POINT:	-30 C (-22 F)
pH:	ND
BULK DENSITY:	ND
MOLECULAR WEIGHT:	ND
MOLECULAR FORMULA:	Mixture
ODOR/APPEARANCE:	
Colorless, Clear Liquid With a Hydrocarbon Odor.	

===== STABILITY AND REACTIVITY =====

STABILITY/INCOMPATIBILITY:

Stable under conditions of normal use. Avoid contact with strong oxidizers.

HAZARDOUS REACTIONS/DECOMPOSITION PRODUCTS:

Thermal decomposition may produce CO and CO2.

===== DISPOSAL CONSIDERATIONS =====

WASTE DISPOSAL (Resource Conservation & Recovery Act - RCRA):

This substance, when discarded or disposed of, is not specifically listed as a hazardous waste in Federal regulations; however it could be characteristically hazardous if it is considered toxic, corrosive, ignitable, or reactive according to Federal definitions (40 CFR 261). Additionally, it could be designated as hazardous according to state regulations. This substance could also become a hazardous waste if it is mixed with or comes in contact with a hazardous waste. Check 40 CFR 261 to determine whether it is a hazardous waste. If it is a hazardous waste, regulations at 40 CFR 262, 263, 264, 268 and 270 apply. The transportation, storage, treatment, and disposal of this waste material must be conducted in compliance with all applicable Federal, state, and local regulations.

There may be specific current regulations at the local, regional, or state level that pertain to this information. Chemical additions, processing, or otherwise altering this material may make the waste

===== TRANSPORT INFORMATION =====

U.S. DEPARTMENT OF TRANSPORTATION (D.O.T.):

Proper Shipping Name (49 CFR 172.101): Not Regulated
Hazard Class (49 CFR 172.101): Not Regulated
UN/NA Code (49 CFR 172.101): Not Regulated
Packing Group (49 CFR 179.101): Not Regulated
Bill Of Lading Desc. (49 CFR 172.101): Petroleum Oil, N.O.I.B.N.
Labels Required (49 CFR 172.101): Not Regulated
Placards Required (49 CFR 172.101): Not Regulated

INTERNATIONAL AND DOMESTIC AIR TRANSPORTATION:

IATA Proper Shipping Name: Petroleum Oil, N.O.I.B.N.
Hazard Class: Not Regulated
Subsidiary Risk: Not Regulated
UN Code: Not Regulated
Package Specification: Not Regulated

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Labels Required: Not Regulated

INTERNATIONAL WATER TRANSPORTATION:

IMDG Proper Shipping Name: Petroleum Oil, N.O.I.B.N.
Hazard Class: Not Regulated
UN Code: Not Regulated
IMDG Page Number: Not Regulated
Labels Required: Not Regulated
Placards Required: Not Regulated

CANADIAN TRANSPORTATION OF DANGEROUS GOODS (T.D.G.):

Shipping Name: Petroleum Oil, N.O.I.B.N.
PIN (UN/NA): Not Regulated
Regulated Class: Not Regulated
Division: Not Regulated
Packaging Group: Not Regulated
Labels Required: Not Regulated
Placards Required: Not Regulated

===== REGULATORY INFORMATION =====

NOTIFICATION:

Any spill or release, or substantial threat of release, of this material to navigable water (virtually any surface water) sufficient to cause a visible sheen upon the water must be reported immediately to the National Response Center (800/424-8802), as required by U.S. Federal Law. Failure to report may result in substantial civil and criminal penalties. Also contact the Coast Guard and appropriate state and local regulatory agencies.

US EPA TOXIC SUBSTANCE CONTROL ACT (TSCA):

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

US EPA SUPERFUND AMENDMENTS & REAUTHORIZATION ACT (SARA) TITLE III INFORMATION:

Listed below are the hazard categories for SARA Section 311/312 (40 CFR 370):

Immediate Hazard: -
Delayed Hazard: X
Fire Hazard: -
Pressure Hazard: -
Reactivity Hazard: -

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CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

All components of this product are listed on the Canadian DSL Inventory.

CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CATEGORIES:

The following WHMIS categories apply to this product:

Compressed Gas:	-	Other Toxic Effects:	X
Flammable/Combustible:	-	Bio Hazardous:	-
Oxidizer:	-	Corrosive:	-
Acutely Toxic:	-	Dangerously Reactive:	-

===== OTHER INFORMATION =====

NFPA RATINGS:

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

HMIS RATINGS:

Health:	1
Flammability:	1
Reactivity:	0
Personal Protective Equipment:	H

REVISION DATE: 25-apr-1997
REPLACES SHEET DATED: 20-jul-1989
COMPLETED BY: BP OIL HSEQ DEPARTMENT

REVISION SUMMARY: The following section(s) have been revised since the previous issue of this MSDS:

COMPOSITION/INFORMATION ON INGREDIENTS
HAZARDS IDENTIFICATION
FIRST AID MEASURES
FIREFIGHTING MEASURES
HANDLING AND STORAGE
EXPOSURE CONTROLS / PERSONAL PROTECTION
PHYSICAL AND CHEMICAL PROPERTIES
STABILITY AND REACTIVITY
TOXICOLOGICAL INFORMATION
TRANSPORT INFORMATION
REGULATORY INFORMATION
OTHER INFORMATION

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for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

ND: No Data NA: Not Applicable *See specific note or section