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MATERIAL SAFETY DATA SHEET **HEATING OIL**

Additional copies of this MSDS can be obtained by calling 1-800-289-2875 or downloaded from our website

at www.burkeoil.com

SECTION 1

PRODUCT INFORMATION

TRADE NAME (As used on label and list)

HEATING OIL

CHEMICAL NAME/SYNONYMS

#2 FUEL OIL, #2 HEATING FUEL PETROLEUM DISTILLATE

CHEMICAL FAMILY

CAS NUMBER

PETROLEUM HYDROCARBONS 68476-34-6

PRODUCT CODE

PREPARATION DATE

OCTOBER 15, 2001

DOES PRODUCT CONTAIN

24-HOUR EMERGENCY ASSISTANCE

CHEMTREC 1-800-424-9300

In case of an accident involving hazardous materials, the Chemical Transportation Emergency Center (CHEMTREC) which is a voluntary program of the Chemical Manufacturer's Association (CMA) operates a 24-hour nationwide telephone number which can be contacted for assistance.

NATIONAL EMERGENCY 1-800-424-8802 **RESPONSE CENTER** MASSACHUSETTS POISON INFORMATION CENTER (617) 232-2020

GENERAL ASSISTANCE

DENNIS K. BURKE, INC. 1-800-289-2875

DOES PRODUCT CONTAIN CARCINOGENS

SECTION 2

HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

| HAZARDOUS INGREDIENTS? | _ | | | NO |
|------------------------|------------|---------|---------------------|-----------------------|
| CHEMICAL/COMMON NAME | CAS NUMBER | PERCENT | OSHA-PEL | ACGIH-TLV |
| #2 Fuel Oil | 68476-34-6 | < 100 | 5 mg/m ³ | 100 mg/m ³ |
| Napthalene | 91-20-3 | < 0.01 | 10 ppm | 10/15 ppm |
| Sulfur | 7704-34-9 | < 0.30 | NA | NA |

Fuel oil is a complex mixture of middle distillate hydrocarbons, with carbon numbers in the range C9 and higher. Fuel oil also contains multifunctional performance additives. Remaining components not determined hazardous or that the hazardous components present are less than 1.0% (0.1% for carcinogens).

This product contains toxic chemicals subject to the reporting requirements of SARA Title III, Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

SECTION 3

PHYSICAL/CHEMICAL CHARACTERISTICS

| BOILING POINT > 340°F | Ε |
|-------------------------------------|--------|
| VAPOR PRESSURE (mm Hg) < 1.0 | (r |
| VAPOR DENSITY (AIR = 1) >5.0 | S |
| SPECIFIC GRAVITY (WATER = 1) 0.879 | A d |
| MELTING POINT < -20°F | 00 |

VAPORATION RATE **n-BUTYL ACETATE = 1)**0.05 SOLUBILITY IN WATER Negligible APPEARANCE AND ODOR - This product is lyed red for non-taxable use. Faint petroleum dor.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS)

MSDS NO. H-1

FLAMMABILITY2 REACTIVITY 0 PROTECTION0

NFPA FIRE HAZARD SYMBOL*

4 - Extreme

3 - High

2 - Moderate

1 - Slight 0 - Insignificant

Health

Reactivity

PAGE 1

Special Hazards

Flammability

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SARA TITLE III INFORMATION

ACUTE HAZARD (Immediate Health)YES CHRONIC HAZARD (Delayed Health)YES **FIRE** HAZARDYES SUDDEN PRESSURE RELEASE HAZARD NO REACTIVITY HAZARDNO

DOT REQUIREMENTS

DOT PROPER SHIPPING NAME FUEL OIL, 3, NA1993, PG III

DOT HAZARD CLASS

COMBUSTIBLE LIQUID

DOT LABELS REQUIRED

NONE

DOT PLACARDS REQUIRED 1993



SECTION 4

FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE LIMITS LEL = 0..6 UEL = 7.5 EXTINGUISHING MEDIA - Dry chemical, Carbon Dioxide, Foam and Water Spray.

SPECIAL FIRE FIGHTING PROCEDURES - Use a water spray to cool fire-exposed containers, structures and to protect personnel. If leak or spill has not ignited, ventilate area to protect personnel attempting to stop leak. Use water to flush spills away from sources of ignition. Do not flush down public sewers or other drainage systems.

Exposed firefighters must wear NIOSH/MSHA approved, positive pres-

sure, self-contained, breathing apparatus with full face mask and fullprotective clothing. Use a smothering technique for extinguishing fire of a combustible liquid. Do not use a forced water stream directly on fuel oil fires, as this will scatter the fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS - Flowing fuel oil can be ignited by self-generated static electricity. Fire hazard is greater as liquid temperature rises above 85°F. Irritating or toxic substances may be emitted upon thermal decomposition. Dangerous when exposed to heat or flame. Runoff to sewer may cause fire or explosion hazard. Containers may explode in heat of fire. (• continued on page 2)

NA = NOT APPLICABLE NDA = NO DATA AVAILABLE

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SECTION 5

REACTIVITY DATA

INCOMPATIBILITY (Materials To Avoid) – This product may react with strong oxidizing agents such as hydrogen peroxide, bromine, and chromic acid

HAZARDOUS DECOMPOSITION OR BYPRODUCTS – Carbon monoxide and carbon dioxide from burning. Oxides of phosphorous from burning. Oxides of sulfur.

SECTION 6

HEALTH HAZARD DATA

ROUTE(S) OF ENTRY – Inhalation, absorption and ingestion if hygienic practices are not observed.

HEALTH HAZARDS (Acute And Chronic)

EYE CONTACT - Practically non-irritating.

SKIN CONTACT – Slightly irritating. Repeated or prolonged contact with the skin could cause redness, itching, inflammation, cracking and possible secondary infection or dermatitis to affected area. Symptoms may include pain, feeling of heat, discoloration, swelling and blistering.

INJECTION – High pressure skin injections may not appear serious at first; tissue will become swollen, discolored and extremely painful.

DERMAL TOXICITY - Practically non-toxic to internal organs.

INHALATION – May cause respiratory tract irritation. Prolonged breathing of vapors can cause central nervous system effects. Symptoms may include: headache, dizziness, loss of appetite, weakness and loss of coordination. Degenerative changes in the liver, kidneys and bone marrow may occur with prolonged, high concentrations. Repeated or prolonged exposures may cause behavioral changes.

INHALATION OF EXHAUSE – The use of any hydrocarbon fuel in an area without adequate ventilation may result in hazardous combustion levels and inadequate oxygen levels. Exposure to exhaust from burning should be minimized. Inhalation of exhaust components, such as carbon monoxide, may cause death in high concentrations.

INGESTION – Moderately toxic. Aspiration into lungs may cause pneumonitis. May cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting and diarrhea. May cause harmful central nervous system effects. Effects may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death. Aspiration hazard if vomiting occurs.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE - Pre-existing dermatitis may be aggravated.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT – Flush immediately with fresh water. Remove contact lenses if worn. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.

SKIN CONTACT – Remove contaminated clothes immediately. Wash skin thoroughly with soap and water. Get medical attention if irritation persists. Wash contaminated clothes.

INJECTION – High pressure injections are serious medical emergencies. Get medical attention immediately.

INHALATION – Remove victim from source of exposure. If not breathing, ensure open airway and institute cardiopulmonary resuscitation (CPR). If breathing is difficult, administer oxygen if available. Get medical attention.

NOTES TO PHYSICIAN - In case of ingestion, gastric lavage with activated charcoal can be used promptly to prevent absorption. Consideration should be given to the use of an intratracheal tube, to prevent aspiration. Individuals intoxicated by fuel oil should be hospitalized immediately, with acute and continuing attention to neurologic

and cardiopulmonary function. Positive pressure ventilation may be necessary. After initial episode, follow for changes in blood variables and delayed appearance of pulmonary edema and chemical pneumonitis. Such patients should be followed for several days or weeks for delayed effects, including bone marrow toxicity, hepatic and renal impairment. Individuals with chronic pulmonary disease will be more seriously impaired, and recovery from inhalation exposure may be complicated.

In case of skin injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss.

SECTION 7

PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED - Shut off ignition sources; no flares, smoking or flames in hazard area. Stop leak if you can do it without risk. Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind and keep out of low areas. Isolate for half mile in all directions if tank truck, or tank is involved in fire. Water spray may reduce vapor but may not prevent ignition in closed spaces.

Considered to be a water pollutant, releases of this product should be prevented from contaminating soil and water, and from entering drainage and sewer systems. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using sand or other non-combustible sorbent materials and place into containers for later disposal.

The Clean Water Act requires the reporting of any discharge of oil and petroleum (in any kind or form) into surface waters. Immediately call the National Emergency Response Center at 1-800-424-8802.

WASTE DISPOSAL METHODS – Place contaminated materials in disposal containers and dispose of in a manner consistent with applicable regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE — Store in tightly closed containers in cool, dry, isolated, well-ventilated area away from heat, sources of ignition and incompatibles. Use nonspark tools. Ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. Material may be at elevated temperatures and/or pressures. Exercise due care when opening bleeders and sampling ports.

EMPTY CONTAINERS – Empty containers contain toxic, flammable/combustible residue or vapors. Do not cut, drill, weld, reuse or dispose of containers unless precautions are taken against these hazards.

SECTION 8

CONTROL MEASURES

RESPIRATORY PROTECTION – NIOSH/MSHA approved selfcontained breathing apparatus or supplied-air mask must be available for non-routine and emergency use. Ventilation may be used to control or reduce airborne concentrations.

VENTILATION

to prevent skin contact.

| LOCAL EXHAUST | YES |
|---|---------------------------|
| MECHANICAL (General) | . EXPLOSION PROOF |
| SPECIAL or OTHER | NA |
| SKIN PROTECTION - Wear impervious glove | s and protective clothing |

EYE PROTECTION – Wear safety glasses or chemical goggles to prevent eye contact. Have eye washing facility readily available where eye contact can occur.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT - Chemical-resistant apron.

WORK PRACTICES - Do not use or store near flame, sparks or hot surfaces. Use only in well ventilated area. Keep container closed. Do not weld, heat or drill container. Replace cap or bung. Do not use pressure to empty drum or explosion may result. Keep head away from container when opening or dispensing.

HYGIENIC PRACTICES – Launder soiled clothing. Wash thoroughly with soap and water after handling.

NA = NOT APPLICABLE NDA = NO DATA AVAILABLE

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