

MURRAY CORPORATION MATERIAL SAFETY DATA SHEET

Part No. 209500 / ~~209500~~
REFRIGERATION OIL

LABEL BRANDS: MURRAY
NAPA
ATLAS

SECTION I — IDENTIFICATION

NAME: Refrigeration Oil
USE: Air Conditioning (Service & Maintenance)
Automotive and Truck Systems
GRADE: Refrigerant
CHEMICAL FAMILY: Refined mineral oil
FORMULA: A mixture of liquid hydrocarbons refined
from petroleum.
TSCA INVENTORY STATUS:
MANUFACTURER / DISTR.: B-V Associates, Inc.
49640 Martin Drive
Wixom, MI 48096
PRODUCT INFORMATION PHONE: (313) 669-5050
MEDICAL EMERGENCY PHONE: (313) 669-5050
TRANSPORTATION EMERGENCY PHONE:
Chemtrec - (800) 424-9300
SARA/TITLE III STATUS:
See HAZARDOUS COMPONENTS & ADDITIONAL
INFORMATION SECTIONS.

SECTION II — PHYSICAL DATA

BOILING POINT: 802° degrees F (428° degrees C)
SPECIFIC GRAVITY (Water = 1): .879
VAPOR DENSITY (Air = 1): > 10
VAPOR PRESSURE: < .0001 mm of Hg at 20° degrees C
EVAPORATION RATE: Negligible
pH INFORMATION: N/A
PERCENT VOLATILE BY VOLUME: Negligible
SOLUBILITY IN WATER: Insoluble
FORM: Viscous liquid
APPEARANCE: Clear fluid
COLOR: Straw/Amber
ODOR: Petroleum odor

SECTION III — HAZARDOUS COMPONENTS

MATERIALS: Non-hazardous refined mineral oil
CAS No.: 72623-85-9, 64741-88-4, 64742-52-5
CLASSIFICATION: Non-hazardous
APPROXIMATE %: 100

SECTION IV — HAZARDOUS REACTIVITY DATA

STABILITY: Material is stable. However, avoid open flames and
high temperatures.
INCOMPATIBILITY: Strong oxidizing agents such as chromic
acid, hydrogen peroxide or bromine.
DECOMPOSITION: Upon combustion, CO₂ and CO are
generated.
POLYMERIZATION: Will not occur

SECTION V — FIRE AND EXPLOSION DATA

FLASH POINT: 495° degrees F (257° degrees C) COC
FLAMMABLE LIMITS IN AIR (% BY VOLUME): Upper - N/A
Lower - N/A
AUTOIGNITION TEMPERATURE: Not determined
AUTODECOMPOSITION TEMPERATURE: N/A
FIRE AND EXPLOSION HAZARDS: N/A
EXTINGUISHING MEDIA: Drychemical or regular foam
SPECIAL FIREFIGHTING INSTRUCTIONS: Fight as a Class B
fire. Wear self contained breathing apparatus (SCBA). Water
spray is an unsuitable extinguishing agent (solid streams
likely to spread fire).

SECTION VI — HEALTH HAZARD DATA

**PRINCIPLE HEALTH HAZARDS (including significant routes,
effects, symptoms of overexposure and medical
conditions aggravated by exposure):**
Inhalation of vapor in high concentration can cause
headache. Minimal external irritation, minimal
gastrointestinal, slightly toxic.
CARCINOGENICITY: Not listed as carcinogen by IARC,
NTP, OSHA, ACGIH
EXPOSURE LIMITS: PEL (OSHA): 5 mg/m³
TLV *(ACGIH): N/A
* TLV is a Registered Trademark of the American
Conference of Governmental Industrial Hygienists.
SAFETY PRECAUTIONS: Avoid breathing vapors and liquid
contact with skin or eyes. Use with sufficient ventilation to
keep employee exposure below recommended limits.
**FIRST AID:
(IF HIGH CONCENTRATIONS ARE INHALED):**
None normally required.
IN CASE OF SKIN CONTACT: Thoroughly wash exposed area
with soap and water. Remove contaminated clothing. Launder
contaminated clothing before reuse.
IN CASE OF EYE CONTACT: Immediately flush with large
quantities of water for 15 minutes. Contact physician.
IF SWALLOWED: Contact physician immediately. Do not induce
vomiting (has laxative effect).
NOTE TO PHYSICIAN: None

SECTION VII — PROTECTION INFORMATION

GENERALLY APPLICABLE CONTROL MEASURES:
General ventilation is adequate. No special precautions
needed for standard manufacturing procedures.
PERSONAL PROTECTIVE EQUIPMENT:
Wear oil resistant rubber gloves (PVA, Nitrile, etc.).
Wear chemical splash goggles where required.
Wear a protective rubber apron if contact is consistent.

over

IDENTITY: 2195 RESTORE WIPES DATED:08/16/02

SECTION I - MANUFACTURED FOR

PRO CHEM, INC. - 1475 BLUEGRASS LAKES PARKWAY - ALPHARETTA, GA. 30004 - EMERGENCY AND INFORMATION#: (800) 241-8180

SECTION II - HAZARDOUS INGREDIENTS

THIS PRODUCT CONTAINS NO HAZARDOUS INGREDIENTS.

SECTION III - PHYSICAL DATA

BOILING POINT:(LIQUID ONLY) > 212 Deg F

SOLUBILITY (LIQUID ONLY): TOTAL

VAPOR PRESSURE (mm Hg.): N/A

VAPOR DENSITY (AIR=1): N/A

APPEARANCE: WHITE, SOFT, NONABRASIVE, NON WOVEN, SYNTHETIC BLEND WIPES MOISTENED WITH COLORLESS, LEMON FRAGRANCED LIQUID.

SPECIFIC GRAVITY (H20=1):APPROX 1 g/ml

MELTING POINT:

EVAPORATION RATE(:) < 1

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT: (LIQUID ONLY)(NON AEROSOL) > 212 Deg F

FLAMMABILITY LIMIT: N/A

EXTINGUISHING MEDIA: USE NORMAL FIRE FIGHTING PROCEDURES

SPECIAL FIRE FIGHTING PROCEDURES: NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE KNOWN

METHOD USED:N/A

LEL:N/A

UEL: N/A

SECTION V - REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID: NONE IDENTIFIED

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZERS, STRONG ACIDS, STRONG BASES

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR CONDITIONS TO AVOID: NONE KNOWN.

SECTION VI - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY: INHALATION? N. SKIN? N. INGESTION? N. EYES? N.

HEALTH HAZARDS (ACUTE AND CHRONIC): PRODUCT IS NOT CONSIDERED HARMFUL. INHALATION: (LIQUID ONLY) MAY CAUSE

SLIGHT IRRITATION TO MUCOUS MEMBRANES. EYE CONTACT (LIQUID ONLY): MAY IRRITATE EYES. INGESTION: MAY CAUSE

NAUSEA, VOMITING, UPSET STOMACH, DIARRHEA. SKIN CONTACT (LIQUID ONLY): MAY IRRITATE SENSITIVE SKIN.

CARCINOGENICITY: NTP? N. IARC MONOGRAPHS? N. OSHA REGULATED? N.

SIGNS AND SYMPTOMS OF EXPOSURE: NONE

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE IDENTIFIED

EMERGENCY AND FIRST AID PROCEDURES: INGESTION (LIQUID ONLY) - DO NOT INDUCE VOMITING. RINSE MOUTH WELL WITH WATER. DRINK LARGE GLASS OF WATER. OFFER MILK. SEEK MEDICAL ATTENTION. EYES (LIQUID ONLY) - FLUSH WITH WATER FOR 15 MINUTES. IF IRRITATION PERSISTS GET MEDICAL HELP. INHALATION (LIQUID ONLY) - FRAGRANCE IS NOT HARMFUL SKIN - (LIQUID ONLY) FLUSH WITH WATER

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: ABSORB SPILLED LIQUID INTO ABSORBENT MEDIA. SMALL SURFACE FILMS CAN BE WASHED DOWN THE DRAIN

WASTE DISPOSAL METHOD: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS FOR NON HAZARDOUS MATERIALS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: STORE IN ORIGINAL SHIPPING CONTAINERS, UNDER COVER AND IN AMBIENT TEMPERATURES, NOT EXCEEDING 113 F. NEVER STORE IN DIRECT HEAT OR SUNLIGHT. AVOID STORAGE IN FREEZING TEMPERATURES. KEEP CLOSED WHEN NOT IN USE. SHELF LIFE IS AT LEAST 18 MONTHS. DO NOT STORE IN EXTREME TEMPERATURES.

OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. READ & FOLLOW LABEL DIRECTIONS.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION (SPECIFY TYPE): NON REQUIRED

VENTILATION: NORMAL INDOOR VENTILATION IS ADEQUATE

LOCAL EXHAUST: MECHANICAL (GENERAL): Y.

SPECIAL: NONE. OTHER LIMITS: NONE.

PROTECTIVE GLOVES: NONE REQUIRED

EYE PROTECTION: NONE REQUIRED

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: NONE NEEDED

WORK & HYGIENIC PRACTICES: RINSE HANDS AFTER HANDLING

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

OTHER PRECAUTIONS:

SECTION 313 SUPPLIER NOTIFICATION