

MATERIAL SAFETY DATA BULLETIN

Version: August 16, 2007

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Used Oil**
SUPPLIER:
Atlantic Industrial Services, Inc.
6600 NW 12TH AVENUE, SUITE 205
FORT LAUDERDALE, FL 33309

Product and MSDS Information: (800) 256-9900 or (318) 688-1191

CHEMTREC: (800) 424-9300 or (202) 483-7616

2. MATERIAL INFORMATION

Identity: USED OIL – On Specification Fuel
Synonyms: USED LUBRICATING OIL; USED ENGINE OIL; USED CRANKCASE OIL; USED MACHINERY OIL; USED MOTOR OIL MIXTURE
Family Chemical Name: PETROLEUM HYDROCARBON
NFPA Rating (scale 0-4): 0-HEALTH 1-FIRE 0-REACTIVITY
MSDS Form No: Used Oil 8-16-07

3. HAZARDS IDENTIFICATION

This material is a complex mixture of paraffinic, naphthenic & aromatic petroleum hydrocarbons that may contain one or more of the following: carbon deposits, sludge, aromatic & non-aromatic solvents, water (as a water-in-oil emulsion), glycols, wear metals & metallic salts, silicon-based antifoaming compounds, and miscellaneous lube-oil additive materials. This product fits the ACGIH definition for mineral-oil mist.

<u>TYPICAL INGREDIENTS:</u>	<u>TYPICAL VOLUME %:</u>	<u>CAS NUMBER:</u>
Used Oil	80 – 100	N/A
Water	0 – 20	N/A
Diesel Fuel	0 – 5	68476-34-6 / 64742-34-3
Gasoline	0 – 1	6474-46-4
Solvents	0 – 1	N/A
Ethylene Glycol	Trace – 3	107-21-1
Deposits & Sludge	Trace – 1	N/A
Misc. Additive Compounds	Trace – 0.5	N/A

EXPOSURE LIMITS IN AIR

	<u>USED OIL: Liq /Mist</u>	<u>DIESEL FUEL: Liq / Mist</u>	<u>GASOLINE</u>
OSHA PEL – TWA (mg/M ³)	NE / 5	NE / 5	NE
OSHA PEL - STEL (mg/M ³)	NE / N/A	NE / N/A	NE
ACGIH TLV – TWA (mg/M ³)	NE / 5	NE / 5	300 (ppm)
ACGIH TLV – STEL (mg/M ³)	NE / 10	NE / 10	NE
CAL OSHA – TWA (mg/M ³)	NE / 5	NE / 5	NE

Note: NE = None Established; N/A = Not Applicable or Not Available

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with large amounts of water for a minimum of 15 minutes. If redness or irritation is present, continue flushing until the irritation subsides. If the material is hot, seek medical attention immediately for thermal burns.

SKIN CONTACT: Wash contact area with soap and water. If clothing is contaminated, minimize contact time on skin by removing contaminated clothing (if applicable) and washing contact area thoroughly with soap and water. If material is hot, flush or submerge affected area in cold water, and seek medical attention immediately for thermal burns.
INHALATION: This material is of low vapor pressure and is not expected to present an inhalation exposure hazard at ambient conditions. If oil mist or aerosol is present, refer to section 8 (Exposure Controls/Personal Protection) of this document for appropriate preventative measures.

INGESTION: This material does not present an ingestion hazard if a very small quantity is accidentally swallowed. May act as a laxative. No treatment is necessary under ordinary circumstances. If cramping and/or diarrhea are present following ingestion, seek medical attention.

5. FIRE PROTECTION & FIRE-FIGHTING MEASURES

FLASH POINT: > 350 F **TEST METHOD:** ASTM D-92 (Cleveland Closed Cup)

AUTOIGNITION TEMP: 500 – 800 F, based on % volatile components. **TEST METHOD:** E 659.

FLAMMABLE LIMITS IN AIR (% by vol): **LOWER:**< 1.0 **UPPER:** 7.0

EXTINGUISHING MEDIA: Use Dry Chemical, Foam, or Carbon Dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam, as flash-steaming and/or frothing may occur, especially if sprayed directly into burning containers.

SPECIAL PROTECTIVE EQUIPMENT: Use Self-Contained Breathing Apparatus (SCBA) in enclosed areas.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Dense, irritating smoke may be generated at the site of the fire. Closed containers of used oil (e.g., 55-gallon drums) at the fire site may rupture and explode when exposed to heat. Use caution when closed, heated containers are present.

NFPA HAZARD ID:

Health: 0

Flammability: 1

Reactivity: 0

HAZARDOUS COMBUSTION PRODUCTS: Carbon Dioxide, Carbon Monoxide, and oxides of sulfur and phosphorus may be generated as products of combustion.

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Immediately contact the local Fire Department, Police Department and other appropriate authorities with (1) the time of the spill, (2) an estimate of the quantity spilled, and (3) the nature of the spill (locally contained or widespread). STAY CALM at all times. In addition, contact the US Coast Guard National Response Center at 1-800-424-8802 if a spill of any amount is made into or upon U.S. navigable waterways, contiguous waterways, drainage ways, and/or adjoining shorelines.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Contain spill immediately. If possible, do not allow spill to enter sewers or watercourses. Remove all sources of ignition. Immediately apply an absorbent material such as sand, clay, diatomaceous earth, etc. to the spilled area. Large, voluminous spills may be picked up using vacuum pumps, shovels, buckets, or other means and placed in drums or other suitable containers.

ENVIRONMENTAL PRECAUTIONS: Disposal of collected material must comply with federal, state, and local regulations. The material, if spilled or discarded, may be a regulated waste – refer to state and local regulations. If regulated solvents are used to clean up spilled material, the resulting waste mixture may be regulated. Department of Transportation (DOT) regulations may apply for transporting this material. Materials should be recycled if possible.

PERSONAL PRECAUTIONS: Refer to section 3 (Hazards Identification), section 4 (First Aid Measures), section 8

(Exposure Controls / Personal protection) and section 11 (Health Hazard Information) for necessary information.

7. HANDLING AND STORAGE

HANDLING: Keep away from heat, sparks and flames. Avoid generating oil mists or aerosols.

STORAGE: Store in closed containers away from sources of heat and oxidizing chemicals. Do not store in, or transfer material to, unmarked containers. Always maintain Class 'B' fire extinguishers & keep readily available wherever this material is stored. See NFPA 30 and OSHA 1910.106 – Flammable and Combustible Liquids.

This material is not classified as hazardous under DOT regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: If vapor or aerosol mist is generated when the material is heated or handled, adequate ventilation in accordance with Good Engineering Practice must be provided to maintain concentrations below the specified exposure or flammable limits.

RESPIRATORY PROTECTION: If oil mist or aerosol is present, use a NIOSH-approved organic-vapor respirator with an organic mist filter. Do not use compressed oxygen in hydrocarbon atmospheres.

EYE PROTECTION: Not required under conditions of normal use. If material is handled such that it could be splashed into eyes, wear a plastic face shield or splash-proof safety goggles.

SKIN PROTECTION: For prolonged and/or repeated exposures, wear impervious clothing (e.g., boots, gloves, aprons, smocks, etc.) over parts of the body subject to exposure. For hand protection, wear latex, nitrile rubber, neoprene or equivalent gloves to prevent contact with the skin. Use barrier-specific protective creams to cover exposed skin that impervious clothing does not cover.

If handling hot material, use insulated protective clothing (e.g., gloves, boots, etc.). All clothing should be properly laundered in hot water & detergent to remove traces of material. If clothing is disposable, overly contaminated or cannot be decontaminated properly (i.e., leather articles, including shoes), these should be properly disposed of in closed appropriate containers.

EXPOSURE LIMITS: Caution should be exercised to not exceed the exposure limits listed in section (3) of this document.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Dark, viscous, oily liquid.

COLOR: Dark brown to black.

ODOR: Pronounced hydrocarbon odor

ODOR THRESHOLD-ppm: NE

pH: N/A

BOILING POINT C(F): > 82 C (180 F)

MELTING POINT C(F): N/A

FLASH POINT C(F): > (350 F)

VAPOR PRESSURE-mmHg 20 C: < 0.1

VAPOR DENSITY: > 1 (Air=1)

EVAPORATION RATE: 0.001 (Ether=1)

DENSITY: 7.1 Lbs/Gal

SPECIFIC GRAVITY, 60F: 0.85 to 0.88

API GRAVITY, 60 F: 22 to 29 API

SOLUBILITY IN WATER: Insoluble

POUR POINT C(F): -12 C (10 F)

FREEZING POINT C(F): N/A

VOLATILE ORGANIC COMPOUNDS: < 2% (by vol)

Note: N/A=NOT APPLICABLE; NE=NOT ESTABLISHED

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable

CONDITIONS TO AVOID: Avoid heat, flame and contact with strong oxidizing agents.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong Oxidizers (e.g., peroxides, chromate and permanganate compounds)

HAZARDOUS DECOMPOSITION PRODUCTS Thermal decomposition products are highly dependent on the combustion conditions. A complex mixture of airborne solid, liquid, particulates and gases will evolve when this material undergoes pyrolysis or combustion. Carbon monoxide and other unidentified organic compounds may be formed upon combustion.

HAZARDOUS POLYMERIZATION: Will not occur under normal temperature and pressure conditions

11. HEALTH HAZARD INFORMATION

ACUTE SYMPTOMS OF EXPOSURE

INHALATION: High concentrations of aerosol or mist may be generated at high temperatures and may be irritating to the respiratory tract, including nose and throat, and may cause difficulty breathing. This may be particularly true with people who have a high level of sensitivity and allergic reactions.

SKIN: Prolonged and/or repeated exposure may cause mild skin irritation, including redness, burning, temporary drying/cracking, and acute dermatitis. Contact with hot material may cause thermal burns.

EYES: Contact may cause slight to moderate irritation, including burning, redness, and tearing. Contact with hot material may cause thermal burns.

INGESTION: May cause mild irritation of the digestive tract, including cramping, diarrhea, nausea and vomiting. Aspiration into the lungs – by initial ingestion or vomiting – may cause mild to severe pulmonary injury.

CHRONIC SYMPTOMS OF EXPOSURE

INHALATION: Exposure to high levels of oil mist concentration may lead to chronic pulmonary conditions such as chronic bronchitis, pneumonia, and emphysema.

SKIN: Cracking, drying and chronic dermatitis

12. STATEMENT OF CARCINOGENICITY

Used motor oil and some cutting oils are possible skin cancer hazards based on animal testing.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Disposal of collected material must comply with federal, state, and local regulations. The material, if spilled or discarded, may be a regulated waste – refer to federal, state and local regulations for regulated waste transport and disposal.

14. TRANSPORT INFORMATION

USA DOT: This material is not classified as hazardous under DOT regulations.

15. REGULATORY INFORMATION

Governmental Inventory Status (TSCA): Components of this material are listed in the TSCA Inventory.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This material contains toxic compounds of zinc

and lead subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and 40 CFR Part 372.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: Immediate (Acute) Health Effects: NO

Delayed (Chronic) Health Effects: YES

Fire Hazard: YES

Sudden Release of Pressure Hazard: NO

Reactivity Hazard: NO

California Prop. 65: This material may contain chemicals known to the State of California to cause cancer. (See also section 11 (Health Hazard Information) and section 12 (Statement of Carcinogenicity).

16. OTHER INFORMATION

USE: Used Oil for Recycling/Re-refining.

Legally required information is given in accordance with applicable regulations. Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. Nothing is intended as a recommendation for uses, which infringe valid patents, or as extending any license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users. Use or re-transmission of the information contained herein in any other format than the format as presented is strictly prohibited. AISI neither represents nor warrants that the format, content or product formulas contained in this document comply with the laws of any other country except the United States of America.