



SAFETY DATA SHEET



Prepared in accordance with
OSHA 2012 Hazard Communication Standard
29 CFR 1910.1200

SECTION 1: PRODUCT IDENTIFICATION

Manufacturer's Name:	Environmental Specialists Inc. 1101 Andrews Avenue Youngstown, OH 44505 www.esrecycling.com	Emergency Telephone Number ***PERS (800) 633 – 8253***
		Information Telephone Number ***(888) 331 – 3443***

Product Number:	UO-001	Use of substance/mixture:	Fuel
Product Name:	On-Spec Used Oil	Synonyms:	Used Oil, Used Oil Fuel, #4 Oil, Waste Oil
Date of Preparation	August 6, 2015	Formula:	Hydrocarbon mixture

SECTION 2: HAZARDS IDENTIFICATION

GHS Signal Word: DANGER

GHS Classifications:	Skin Corrosion/Irritation	Category 2
	Eye Damage/Irritation	Category 2B
	Sensitization – Respiratory	Category 1
	Sensitization – Skin	Category 1
	Germ Cell Mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Toxic to Reproduction	Category 1 B
	Specific Target Organ Toxicity – Single Exposure (kidneys, CNS, lungs)	Category 1
	Specific Target Organ Toxicity – Single Exposure (CNS, respiratory tract)	Category 3
	Aspiration Hazard	Category 1

GHS Hazard Pictograms



GHS Phrases: Harmful if swallowed.
Causes skin irritation and eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause allergic skin reaction.
May cause genetic defects and cancer.
May damage fertility of the unborn child.
Causes damage to kidneys, central nervous system, and lungs.
May cause respiratory irritation, drowsiness or dizziness.
May be fatal if swallowed and enters airways.

GHS Precautionary Statements: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe gas, fumes, vapor, or spray.
In case of inadequate ventilation wear respiratory protection.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Use only outdoors or in a well-ventilated area.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %
Used Oils	Mixture	80 – 100%
Water	NA	0 – 20%
Diesel Fuel	68476-34-8	0 – 5%
Gasoline	6474-46-4	0 – 1%
Aromatic Hydrocarbons (solvents)	NA	0 – 1%
Chlorinated Paraffins	NA	< 0.5%
Metals, may include iron, zinc, arsenic, cadmium, chromium, and lead.	NA	0 – 2%

SECTION 4: FIRST AID MEASURES

Eye Contact:	Flush eye immediately with fresh water. Remove contact lenses if worn. Eyelids should be held away from the eyeball to ensure thorough rinsing. This material is not expected to cause prolonged or significant eye irritation. In the event irritation persists, seek medical attention.
Skin:	No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove material from skin, use soap and water. Discard contaminated clothing and shoe or thoroughly clean before reuse.
Ingestion:	No specific first aid measure required. Do not induce vomiting. As a precaution get medical advice.
Inhalation:	No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties:	Not classified by OSHA as flammable or combustible material.
Flash Point:	Tag Closed Cup = 210° F - 275° F (61.1° C - 66° C)
Flammable Limits:	LEL – Not Applicable UEL – Not Applicable
Autoignition:	No data available
Hazardous Combustion Products:	Carbon dioxide, carbon monoxide, unburned hydrocarbons and oxides of sulfur, zinc and/or nitrogen.
Extinguishing Media:	Use dry chemical, carbon dioxide, water fog, or foam to extinguish all fires. DO NOT USE HIGH-PRESSURE WATER STREAMS.
Fire Fighting Instructions:	<p>This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.</p> <p>Use a smothering technique to extinguish a combustible liquid fire. Do not force water stream directly on oil fires, as this will scatter the fire. Use a water fog to cool fire-exposed containers, structures, and to protect personnel.</p>
Fire and Explosion Hazards:	<p>Fire may produce irritating, poisonous and/or corrosive fumes. Vapors may cause drowsiness and dizziness. Containers may rupture or explode if exposed to heat. Empty product containers may retain product residue and can be dangerous.</p> <p>Product is not sensitive to mechanical impact or static discharge.</p>





SECTION 6: ACCIDENTAL RELEASE MEASURES

- Protective Measures:** Eliminate all source of ignition in vicinity of spilled material.
- Spill Management:** Stop the source of the release if it can be done without risk. Contain release to prevent further contamination of soil, surface water or groundwater. **DO NOT** flush down public sewers or other drainage systems. Place contaminated materials in appropriate containers and dispose of in accordance with local, state, and federal regulations.
- Spill Reporting:** The Clean Water Act requires the reporting of any discharge of petroleum based materials (in any form) into surface waters. **Immediately** call the National Emergency Response Center at 1-800-424-8802.

SECTION 7: HANDLING AND STORAGE

- Handling:** To avoid contamination of product keep containers closed when not in use. Empty containers retain product residues (solid, liquid, and/or vapor) that can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to flames, sparks, heat or other potential ignitions sources. Empty containers should be completely drained, properly closed, and promptly returned to drum reconditioner or disposed of properly.
- Storage:** Keep containers tightly closed when not in use. Store in a cool, dry well-ventilated area. Do not store with strong oxidizing agents. Keep away from open flames and high temperatures.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Engineering Controls:** Use in a well-ventilated area. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). Have an eye wash station readily available where eye contact can occur.
- Personal Protective Equipment:** Personal protective equipment (PPE) selections vary based on the potential exposure conditions such as handling practices, concentration and ventilation. At a minimum safety glasses and skin protection should be worn. Additional PPE may be required based on specific working conditions.
- Eye Protection:**  Safety glasses equipped with side shields are recommended for minimal protection. Wear goggles if splashing or spraying for added protection in the event splashing or spraying is expected.
- Hand Protection:**  Gloves should be nitrile, neoprene, Viton, polyvinyl alcohol (PVA), or equivalent protection. Use of natural rubber (latex), polyvinyl chloride (PVC) or equivalent material is not recommended.
- Skin Protection:**  Uniforms or coveralls should provide adequate protection under normal working conditions. If prolonged contact is unavoidable, wear protective clothing made of polyvinyl alcohol (PVA), neoprene, or nitrile. Remove contaminated clothing and launder before reuse. Heavily contaminate clothing and leather goods should be removed promptly and cleaned or discarded.
- Respiratory Protection:**  Use of a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be worn when the concentration of vapor or mist exceeds applicable exposure limits. Respirator selection, use, and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

Occupational Exposure Guidelines:

Substance	Applicable Workplace Exposure Levels		NE: Not Established
	ACGIH	OSHA	
Oil Mist, Mineral	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³	

	ACGIH	OSHA	NE: Not Established
Diesel Fuel Mist	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³	
Gasoline	TWA: 300 ppm STEL: NE	NE	

This product meets the definition of On-Specification Used Oil Fuel and contains the following allowable levels of regulated metals.

Metal	Arsenic	Cadmium	Chromium	Lead
Level	5 ppm	2 ppm	10 ppm	100 ppm

	ACGIH	OSHA
Arsenic	TWA: 0.01 mg/m ³	TWA: 0.01 mg/m ³
Cadmium (fume)	TWA: 0.01 mg/m ³	TWA: 0.005 mg/m ³
Chromium	TWA: 0.5 mg/m ³	TWA: 1 mg/m ³
Lead	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³

This product contains polynuclear aromatic hydrocarbons (PAHs). The following PAHs may be present: naphthalene, fluoranthene, phenanthrene, pyrene, and others.

	ACGIH	OSHA
Naphthalene	10 ppm	TWA: 10 ppm (50 mg/m ³)
Pyrene	NE	TWA: 0.2 mg/m ³

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color:	Light brown to black	Physical State:	Liquid
Odor:	Mild petroleum hydrocarbon	Vapor Pressure:	<0.1 mmHg @ 68 °F
pH:	NA	Vapor Density:	>1.0 (H ₂ O = 1)
Boiling Point:	180 – 220 °F	Solubility:	Insoluble in water
Freezing Point:	NA	Specific Gravity:	0.85 – 0.88 g/ml (H ₂ O = 1)

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Keep away from extreme heat, sparks, open flames and strong oxidizers
Incompatibility with Other Materials:	May react with strong acids, strong oxidizing agents such as chlorates, nitrates, peroxides, alkalis, reducing agents, halogens or reactive metals.
Hazardous Decomposition Products:	No additional hazardous decomposition products other than those identified in Section 5 of this SDS.

SECTION 11: TOXICOLOGICAL INFORMATION

Component Analysis - LD₅₀/LC₅₀

Used Oil: Dermal LD₅₀ Rabbit >4480 mg/kg; Oral LD₅₀ Rat >2000 mg/kg

Metals. May include lead, iron, zinc, copper, chromium, arsenic, and others: Oral LD₅₀ Rat 984 mg/kg (related to Iron)

Polynuclear aromatics. May include naphthalene, fluoranthene, phenanthrene, pyrene: Oral LD₅₀ Rat 2700 mg/kg (related to Pyrene).

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.
- 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.
- Skin:** Prolongs and/or repeated exposure may cause mild skin irritation, including redness, burning, temporary drying/cracking, and acute dermatitis. Contact with hot material may cause burns.
- Eyes:** Contact may cause slight to moderate irritation, including burning, redness, and tearing. Contact with hot oil may cause thermal burns.

Chronic Symptoms of Exposure:

- Inhalation:** Exposure to high levels of solvent mist concentration may lead to chronic pulmonary conditions such as chronic bronchitis, pneumonia, and emphysema.
- Skin:** Cracking, drying, and chronic dermatitis.

SECTION 12: ECOLOGICAL INFORMATION

This material may be harmful to human, animal, and aquatic life if spilled on soil or in water. Petroleum products can be harmful or fatal to aquatic life and waterfowl. Petroleum based materials are persistent and do not readily biodegrade.

SECTION 13: DISPOSAL CONSIDERATIONS

Material Disposal: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Container Disposal: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard if heated above the flash point. Do not puncture, cut or weld uncleaned drums. Send to drum recycler or metal reclaimer.

Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14: TRANSPORTATION INFORMATION

US DOT Status: This material is not regulated by the US DOT and therefore not subject to the regulations in 49 CFR Parts 171 – 180. This product is oil and regulated under 49 CFR 130. If shipped by rail or highway in a tank with a capacity of 3500 gallons or more, it is subject to these requirements. Mixtures or solutions containing 10% or more of this product may also be subject to this rule.

SECTION 15: REGULATORY INFORMATION

- TSCA Inventory** Components of this material are exempt from the requirements of the Toxic Substances Control Act Inventory.
- SARA 302/304 Emergency Planning and Notification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for “Extremely Hazardous Substances” listed in 40 CFR 302.4 and 40 CFR 355.
- There are no components in this product on the SARA 302 list.
- SARA 311/312 Hazard Identification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 311 and 312 to submit aggregate information on chemical by “Hazard Category” as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:

Immediate (Acute) Health Effects:	No
Delayed (Chronic) Health Effects:	Yes
Fire Hazard:	Yes
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No

SARA 313 Toxic Chemical Notification and Release Reporting

This product contains no constituents listed in 40 CFR 372 and therefore is not subject to the requirements of Section 313 of SARA.

CERCLA

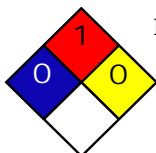
The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQs) including petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances that may present in this product are subject to CERCLA, these include the components of gasoline (benzene, toluene, xylene, ethylbenzene, and 1,2,4-trimethylbenzene). The concentration of each regulated material is expected to be <1%. Zinc and zinc compounds may also be present in concentrations <0.1%.

Clean Water Act (CWA)

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spill which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424 – 8802.

SECTION 16: OTHER INFORMATION

NFPA Ratings: Health: 0
Flammability: 1
Reactivity: 0



HMIS Ratings: Health: 1
Flammability: 1
Reactivity: 0

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
SPECIAL PROTECTION	<input type="checkbox"/>

0 – Least, 1 – Slight, 2 – Moderate, 3 – High, 4 – Extreme

These values are obtained using the guidelines or published evaluations by the National Fire Protection Association (NFPA) of the National Paint and Coating Association (for HMIS ratings).

LABEL RECOMMENDATION: ON-SPEC USED OIL

NOTICE: The information herein is based on data considered to be accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety information. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.