

USED OIL



MATERIAL SAFETY INFORMATION SHEET

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: USED OIL

SYNONYMS: Waste oil; Used lubricating oil; Oil and water mixture.

PRODUCT CODE: Not applicable.

PRODUCT USE: Oil or oil and water mixture for re-refining or reprocessing.
If this product is used in combination with other products, refer to the Material Safety Data Sheets for those products.

These numbers are for emergency use only. If you desire non-emergency product information, please call a telephone number listed below.	24-HOUR EMERGENCY TELEPHONES	
	MEDICAL:	TRANSPORTATION (SPILL):
	1-800-752-7869 (USA) Extension 2	1-800-468-1760 (USA)
	1-312-906-6194 (CANADA)	1-613-996-6666 (CANADA)

MANUFACTURER/SUPPLIER: Safety-Kleen Corp.
1301 Gervais Street, Suite 300
Columbia, SC 29201
USA
803-933-4200

TECHNICAL INFORMATION: 1-800-265-2792

MSIS FORM NUMBER: 81451

ISSUE: March 18, 1999

ORIGINAL ISSUE: January 15, 1990

SUPERSEDES: June 11, 1998

PREPARED BY: Product MSDS Coordinator

APPROVED BY: MSDS Task Force

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

WT%	NAME	SYNONYM	CAS NO.	OSHA PEL		ACGIH TLV		LD	LC ^b
				TWA	STEL	TWA	STEL		
65 to 100	Lubricating oils, used	Used oil	70514-12-4	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
0 to 25	Water/solids	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
0 to 10	Hydrocarbon solvents May include gasoline, diesel fuel, jet fuel, mineral spirits, etc.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
0 to 1.5	Metals May include lead, iron, zinc, copper, chromium, arsenic, nickel, and others: each below 1.0 WT%.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
0 to 1.0	Polynuclear aromatics May include naphthalene, fluoranthene, phenanthrene, pyrene, and others: each below 0.3 WT%	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.
0 to 0.5	Chlorinated solvents	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.

N.Av. = Not Available

^aOral LD50

^bInhalation LC

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING!

APPEARANCE

Liquid, black and viscous (thick), petroleum odor.

IMMEDIATE HAZARDS

Causes respiratory tract (nose, throat, and lungs), eye, and skin irritation.

DELAYED HAZARDS

Suspect cancer hazard. Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

This product contains material which can cause birth defects.

This product contains material which can cause lung, liver, kidney, skin, and/or central nervous system damage.

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

POTENTIAL HEALTH EFFECTS

Effects may vary depending on material composition. Typical effects may include:

INHALATION (BREATHING): High vapor or mist concentrations may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea and vomiting. High concentrations of vapor or mist may cause headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

EYES: Direct contact with product may cause irritation.

SKIN: Direct contact with product may cause irritation. A single, prolonged exposure may cause the product to be absorbed through the skin in harmful amounts and cause harm as noted under **INHALATION (BREATHING)**.

INGESTION (SWALLOWING): This product may be harmful or fatal if swallowed. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing cardiovascular, liver, kidney, central nervous system, respiratory tract (nose, throat, and lungs), and/or skin disorders may have increased susceptibility to the effects of exposure.

CHRONIC: Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball. Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling.

CANCER INFORMATION: This product contains mineral oils, untreated or mildly treated, which can cause cancer. This product may contain hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics which can cause cancer. Risk of cancer depends on duration and level of exposure. For more information, see **SECTION 11: CARCINOGENICITY**.

SECTION 4: FIRST AID MEASURES

INHALATION (BREATHING): Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Someone should stay with victim. Get medical attention if breathing difficulty persists.

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

EYES:	For direct contact, immediately flush eyes with plenty of water, holding eyelids apart, for 15 minutes. If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Get medical attention if irritation or pain persists.
SKIN:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain persists.
INGESTION: (SWALLOWING)	Immediately get medical attention. Do NOT induce vomiting. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs.
NOTE TO PHYSICIANS:	No specific antidote available. Treat symptomatically and supportively. Call medical emergency telephone number (see SECTION 1) for additional information.

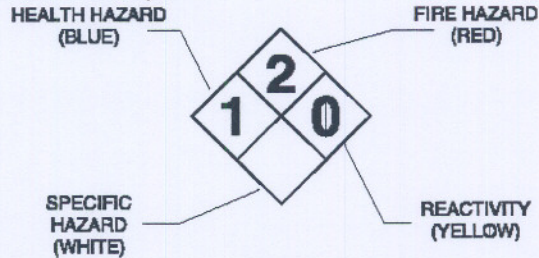
SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT:	180°F (82°C) (minimum) Pensky-Martens Closed Cup
FLAMMABLE LIMITS IN AIR:	Not available.
AUTOIGNITION TEMPERATURE:	Not available.
HAZARDOUS COMBUSTION PRODUCTS:	Decomposition and combustion materials may be toxic. Burning may produce phosgene gas, nitrogen oxides, and carbon monoxide.
CONDITIONS OF FLAMMABILITY:	Heat, sparks, or flame.
EXTINGUISHING MEDIA:	Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

**NFPA 704
HAZARD
IDENTIFICATION:**

This information is intended solely for the use of individuals trained in this system.



**FIRE FIGHTING
INSTRUCTIONS:**

Keep storage containers cool with water spray. Positive-pressure, self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will only provide limited protection.

**FIRE AND
EXPLOSION HAZARDS:**

Vapor explosion hazard indoors, outdoors, or in sewers. Vapors may travel to ignition source and flashback. Vapors will spread along the ground and collect in low or confined areas. Run-off to sewer may create a fire hazard. Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Not sensitive to mechanical impact. Product may be sensitive to static discharge, which could result in fire.

**EMERGENCY RESPONSE
GUIDE NUMBER:**

128
Reference *North American Emergency Response Guidebook*

SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain away from surface waters and sewers. Contain as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean, non-sparking tool into a sealable container for disposal.

Additionally, for large spills: isolate hazard area. Keep unnecessary and unprotected personnel from entering. Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

SECTION 7: HANDLING AND STORAGE

HANDLING:	Keep away from heat, sparks, or flame. Where explosive mixtures may be present, equipment safe for such locations should be used. Use clean, non-sparking tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tanks cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.
SHIPPING AND STORING:	Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, or grind. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See SECTION 14: TRANSPORT INFORMATION for Packing Group information.
PERSONAL HYGIENE:	Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco products. Clean contaminated clothing, shoes, and protective equipment before reuse. Discard contaminated clothing, shoes, or protective equipment if they cannot be thoroughly cleaned.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:	Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.
PERSONAL PROTECTIVE EQUIPMENT	
RESPIRATORY PROTECTION:	Use NIOSH-approved respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. A self-contained breathing apparatus (SCBA) and full protective equipment are required for large spills or fire emergencies. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4-M1982.
EYE PROTECTION:	Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

SKIN PROTECTION: Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended.

OTHER PROTECTIVE EQUIPMENT: Where spills and splashes are likely, wear appropriate chemical-resistant apron or other protective clothing. Clean water should be available in work areas for flushing the eyes and skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, APPEARANCE, AND ODOR: Liquid, black and viscous (thick), petroleum odor.

ODOR THRESHOLD: Not available.

SPECIFIC GRAVITY: 0.8 to 1.0 at 60°F (15.6°C) (water = 1)

DENSITY: 6.7 to 8.3 LB/US gal (800 to 1000 g/l) (approximately)

VAPOR DENSITY: greater than 1 (air = 1) (based on similar materials)

VAPOR PRESSURE: Not available.

BOILING POINT: Not available.

FREEZING/MELTING POINT: Not available.

pH: Not applicable.

EVAPORATION RATE: less than 1 (butyl acetate = 1)

SOLUBILITY IN WATER: Partial.

MOLECULAR WEIGHT: Not applicable.

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.

INCOMPATIBILITY: Avoid acids, alkalies, oxidizing agents, reducing agents, or reactive halogens.

REACTIVITY: Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

**HAZARDOUS DECOMPOSITION
PRODUCTS:**

None under normal temperatures and pressures.
See also **SECTION 5: HAZARDOUS
COMBUSTION PRODUCTS.**

SECTION 11: TOXICOLOGICAL INFORMATION

SENSITIZATION:

Based on best current information, there may be known human sensitization associated with this product.

CARCINOGENICITY:

IARC classifies chemicals by their carcinogenic risk, including agents that are known, probable, or possible carcinogens. NTP classifies chemicals as either known carcinogens, or for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. ACGIH recognizes several categories of carcinogens, including confirmed human carcinogens and suspected human carcinogens.

Mineral oils, untreated or mildly treated are listed by IARC as a known carcinogen. Mineral oils, untreated or mildly treated are classified by NTP as having limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. Mineral oils, untreated or mildly treated are recognized by ACGIH (in the Notice of Intended Changes) as a confirmed human carcinogen.

There may be hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics present in this product which are listed by OSHA as known carcinogens. There may be hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics present in this product which are listed by IARC as known, probable, or possible carcinogens. There may be hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics present in this product which are classified by NTP as known carcinogens or as having limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. There may be hydrocarbon and chlorinated solvents; metals, and polynuclear aromatics present in this product which are recognized by ACGIH as confirmed or suspected human carcinogens.

**REPRODUCTIVE
TOXICITY:**

Based on best current information, there may be reproductive toxicity associated with this product.

TERATOGENICITY:

Based on best current information, there may be teratogenicity associated with this product.

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

MUTAGENICITY: Based on best current information, there may be mutagenicity associated with this product.

TOXICOLOGICALLY SYNERGISTIC PRODUCT(S): Based on best current information, there may be toxicologically synergistic products associated with this product.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Not available.

OCTANOL/WATER PARTITION COEFFICIENT: Not available.

VOLATILE ORGANIC COMPOUNDS: Not available.
Photochemically reactive as per 40 CFR Part 51.100(s).

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

USEPA WASTE CODE(S): Not available.

SECTION 14: TRANSPORT INFORMATION

DOT: If flash is 140°F (60°C) to 200°F (93°C) by Closed Cup:
COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM OIL), NA1993,
PG III
If flash is greater than 200°F (93°C) by Closed Cup: Not regulated.

TDG: Not regulated.

**USED OIL
MATERIAL SAFETY INFORMATION SHEET**

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

**SARA SECTIONS
311 AND 312:**

This product may pose the following physical and health hazards as defined in 40 CFR Part 370 and may be subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986:

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard
Fire Hazard

SARA SECTION 313:

This product may contain toxic chemicals subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

TSCA:

Not available.

CALIFORNIA:

This product is not for sale or use in the State of California.

CANADIAN REGULATIONS

WHMIS:

Any of these may be applicable depending on the extent and type of contamination: B2, B3, D1A, D1B, D2A, D2B.

**CANADIAN
ENVIRONMENTAL
PROTECTION ACT
(CEPA):**

Not available.

SECTION 16. OTHER INFORMATION

REVISION INFORMATION:

SECTION 1: SYNONYMS
SECTION 2: Used Oil information

LABEL/OTHER INFORMATION: Not available.

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product as supplied to the user.

©1999 Printed in the USA.

