

MATERIAL SAFETY DATA SHEET

Kurt J Lesker Company

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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TKO 19 ULTRA
CHEMICAL NAME: White Mineral Oil, USP

SUPPLIER: 24 HR EMERGENCY
Kurt J. Lesker Co. TELEPHONE NUMBERS
1515 Worthington Ave. (412) 233-4200
Clairton, Pa. 15025

CONTACT: CHEMTREC (U.S.) 800/424-9300
Sales: 800-245-16546 EMERGENCY PHONE:
800-245-1656

TRANSPORTATION:

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CONCENTRATION	CAS#EINECS#
White Mineral Oil	100%	8042-47-5
Vitamin E	5.0-10.0 PPM	59-02-9

COMMENTS:
This is not a dangerous substance

3. HAZARDS IDENTIFICATION

APPEARANCE

Physical state Liquid

Color Water-white

Odor

None

EMERGENCY OVERVIEW

THIS PRODUCT IS AN NF OR USP GRADE WHITE MINERAL OIL. IT IS NOT EXPECTED TO PRESENT ANY UNUSUAL HAZARDS, IN PROPER USE.

POTENTIAL HEALTH EFFECTS

Swallowing

Acute effects

Ingestion is unlikely to have any toxic effects but the product may act as an intestinal lubricant and result in diarrhea and frequent loose stools.

If vomiting occurs, aspiration may cause delayed pulmonary edema and chemical pneumonia.

Skin absorption

Acute effects

Harmful effects are not expected from short periods of contact.

Effects of repeated overexposure

Prolonged or repeated contact may lead to skin irritation by dermatitis or oil acne.

Inhalation

Acute effects

Harmful effects are not expected from static vapor at ambient temperature.

Inhalation of mist or spray may be harmful.

Chronic effects

Aspiration may cause pulmonary edema or aspiration pneumonia.

Oil deposits in the lung may lead to fibrosis and reduced pulmonary function.

Prolonged or repeated inhalation of excessive amounts of oil mist or vapors may cause irritation of the respiratory tract.

Skin contact

Acute effects

No evidence of harmful effects from available information.

Eye contact

Acute effects

No evidence of harmful effects from available information.

POTENTIAL ENVIRONMENTAL EFFECTS

This product is stable in water, and can be mechanically separated from water. The water may be suitable for disposal in a biological waste water treatment plant. White mineral oil will be inherently biodegradable in water under aerobic conditions, and will be ultimately biodegrades by micro-organisms (although the biodegradability of White Mineral Oil will necessarily be limited by its low solubility in water).

4. FIRST AID MEASURES

EYES:

No emergency care anticipated. Flush eyes thoroughly with water for several minutes. Obtain medical attention if discomfort persists.

SKIN:

No emergency care anticipated. Wash skin with soap and water. Remove contaminated clothing. Wash clothing before re-use. Obtain medical attention if irritation persists.

SWALLOWING:

Do not induce vomiting. Treat symptomatically. Not expected to be toxic by ingestion.

INHALATION:

Obtain medical attention. Oxygen may be given by qualified personnel if breathing is difficult or cyanosis (blue discoloration of skin) is noted. Give artificial respiration if not breathing. Remove to fresh air if aerosol spray is inhaled. Aspiration may cause pulmonary edema or aspiration pneumonia. Exposed persons should be kept under medical observation for at least 48 hours because delayed effects may occur.

5. FIRE FIGHTING MEASURES

FLASHPOINT > 188 degrees C (370 degrees F)

NFPA CLASSIFICATION

Health: 0	Flammability: 1	Reactivity: 0	Special provisions:
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EXTINGUISHING MEDIA:

Suitable: Treat as an oil fire.

Small fires:

-CO2

-dry powder

- foam
- Large fires:
- alcohol-type foam or universal-type foams
- water fog

Unsuitable: Oil will float on water and can spread any fire.

FIREFIGHTING PROCEDURES:

Use water spray to cool fire-exposed containers and structures. If a rail or tank truck is involved in a fire, ISOLATE for 800 meters (0.5 miles) in all directions. Shut off fuel to fire if it is possible to do so without hazard. If this is impossible, withdraw from the area and let the fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.

PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Body covering protective clothing, full “turn-out” gear. Self-contained breathing apparatus with full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb on inert material such as sand, earth, vermiculite.

PERSONAL PRECAUTIONS:

Wear protective clothing when taking up spill. Eliminate sources of ignition.

ENVIRONMENTAL PRECAUTIONS

This product is insoluble in water and will float on the surface. Prevent from entering sewers or drains. Should this product enter sewers or drains, it should be pumped out into an open vessel. Emergency services may need to be called to assist in this operation.

Method for cleaning up

Floor may be slippery; use care to avoid falling.

7. HANDLING AND STORAGE

HANDLING:

Handling precautions

Never use pressure to empty drums. Keep drums tightly closed to prevent contamination. Residual vapors may explode on ignition; do not puncture, drill, grind, or weld near this container. Electrically bond and ground all containers and equipment before transfer or use of material.

STORAGE:

Storage requirements

Normal precautions common to safe manufacturing practice should be followed in handling and storage. Store in a dry place. Keep out of strong sunlight. Keep away from heat and flame. Keep container tightly closed.

Further information on storage

Keep away from strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS

<u>Component</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Mineral Oil Mist	TWA (mist), ACGIH	5.0 mg/m ³	If used in way that generates a “mist” observe the limits for Mineral Oil Mist.
	STEL (mist), ACGIH	10.0 mg/m ³	

ENGINEERING CONTROLS:

Ventilation

Local ventilation is needed in the presence of airborne mist.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE:

Face shield or chemical splash goggles in case of splashing.

SKIN:

Wear protective clothing, such as long sleeves to minimize skin contact.

RESPIRATORY:

If vapor and/or mist is generated by heating, spraying, etc., wear an organic vapor respirator with a mist filter. No special respiratory protection is normally required.

PROTECTIVE CLOTHING:

Hand protection / protective gloves

Wear oil resistant gloves.

Industrial hygiene measures

Remove contaminated clothing and clean it.

Do not eat or drink at work.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: None

APPEARANCE:

COLOR: Water-white

PH:

PERCENT VOLATILE: Nil

VAPOR PRESSURE: < 0.008 hPa (0.01 mmHg) at 20 degrees C

KINEMATIC VISCOSITY: > 30 mm²/s at 40 degrees C

BOILING POINT: > 230 degrees C at STP unless specified below.

SOLUBILITY IN WATER: Insoluble

SOLUBILITY IN ORGANIC SOLVENTS: Soluble

SPECIFIC GRAVITY: (H₂O=1) <1

PARTITIONING COEFFICIENT: log POW: >6 This product is soluble in oil.

FLASH POINT: >188 degrees C (370 degrees F) Method: Cleveland open cup ASTM D 92

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable

HAZARDOUS COMBUSTION PRODUCTS:

Burning can produce the following combustion products:

Oxides of carbon.

Soot

INCOMPATIBLE MATERIALS:

Normally unreactive; however avoid contact with:

Strong oxidizing agents. Sunlight or ultraviolet light. Heat or high temperature.

11. TOXICOLOGICAL INFORMATION

SWALLOWING

Test results

Acute toxicity: LD50 – Rat

- Result: > 5,000mg/kg

Remark: Test results are based on analogy with a similar material

SKIN CONTACT

Test results

Skin irritation: Species: Guinea pigs

Result: Non irritating.

EYE CONTACT

Test results

Eye irritation: Species: Rabbit

Result: No irritation

SENSITIZATION

Test results: Species: Skin - Guinea pigs
Result: Non sensitizing.

12. ECOLOGICAL INFORMATION

This product is stable in water, and can be mechanically separated from water. The water may be suitable for disposal in a biological waste water treatment plant. White mineral oil will be inherently biodegradable in water under aerobic conditions, and will be ultimately biodegraded by micro-organisms (although the biodegradability of White Mineral Oil will necessarily be limited by its low solubility in water).

13. DISPOSAL CONSIDERATIONS

GENERAL: Incineration is probably the best means of disposal. Dispose of in accordance with appropriate Federal, State, and local regulations.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION) Classification**

This product is not regulated by DOT.

Freight description road: 65 PETROLEUM OIL, N.O.I.B.N

IMDG Classification

This product is not regulated by IMDG.

ICAO Classification

This product is not regulated by ICAO.

15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

***** NONE *****

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name	CAS#	New Jersey TS Number
White Mineral Oil	8042-47-5	
Vitamin E	59-02-9	

EPA Hazard Categories (SARA 311,312): None

CHEMICAL INVENTORY

Canada: The ingredients of this product are on the DSL.

Europe: The ingredients of this product are on the EINECS inventory.

United States: The ingredients of this product are on the TSCA inventory.

Australia: The ingredients of this product are on the AICS inventory.

Japan: The ingredients of this product are on the ENCS inventory.

Korea: This product is listed on the Existing Chemicals List (ECL).

FDA

Food additive

This product is an NF or USP grade White Mineral Oil which is used for a variety of applications such as food grade lubricants and in the production of cosmetics and pharmaceuticals. It meets the requirements of the US FDA as per 21 CFR 172.878 and 21 CFR 178.3620(a).

16. OTHER INFORMATION

RECOMMENDED USES AND RESTRICTIONS

Please consult the product and/or application information bulletins for this product.

HMIS RATING

HEALTH: 0
 FLAMMABILITY: 1
 REACTIVITY : 0
 PROTECTION: -

LEGEND

STP	Standard temperature and pressure
W/W	Weight/Weight
0 (HMIS)	Minimal hazard
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

MANUFACTURER DISCLAIMER:

The opinions expressed herein are those of qualified experts within Kurt J. Lesker Co. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of the Kurt J. Lesker Co., it is the user's obligation to determine the conditions of safe use of the products.