SAFETY DATA SHEET



Mineral Seal Oil

Section 1. Identification

GHS product identifier Mineral Seal Oil

Chemical name Distillates (petroleum), hydrotreated middle

Synonyms Gasoil - unspecified; Distillates, petroleum, hydrotreated middle; Distillates,

petroleum, straight run middle, hydrotreated; Distillates (petroleum), hydrotreated

middle.

Code 19540 MSDS # 19540

Supplier's details.
Varouh Oil Inc.

Technical Contact: (847) 734-7630

Emergency telephone number (8am - 4pm CT M-F)

Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300

(United States Only)

Section 2. Hazards identification

OSHA/HCS status ... This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the

substance or mixture

ASPIRATION HAZARD - Category 1

GHS label elements



Hazard pictograms

Signal word "Danger

May be fatal if swallowed and enters airways. Hazard statements

Precautionary statements

Prevention .. Response

Storage

Not applicable.

vomiting.

Store locked up.

Disposal _ Dispose of contents and container in accordance with all local, regional, national and international

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce

regulations.

Hazards not otherwise

Defatting to the skin.

classified

Section 3. Composition/information on ingredients

Substance/mixture ..Substance

Chemical name _ Distillates (petroleum), hydrotreated middle

Other means of - unspecified; Distillates, petroleum, hydrotreated middle; Distillates,

petroleum,

identification straight run middle, hydrotreated; Distillates (petroleum), hydrotreated middle. CAS number/other identifiers

Mineral Seal Oil

Section 3. Composition/information on ingredients

Ingredient name		CAS number
Distillates (petroleum), hydrotreated middle	100	64742-46-7

^{* =} Various = Mixture = Proprietary

Any concentration shown as a range is to protect confidentiality or is due to process variation. Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower Eve contact

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention if irritation occurs.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not

> breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar,

tie. belt or waistband.

Skin contact Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove

contaminated clothing and shoes. Get medical attention if symptoms occur. Wash

Ingestion clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact

Ingestion

Defatting to the skin. May cause skin dryness and

irritation.

May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact ... No specific data. may include the

Inhalation ... No specific data.

Skin contact Adverse

symptoms following: irritation dryness cracking

Ingestion Adverse symptoms may include the following:

nausea or vomiting

Indication of immediate medical attention and special treatment needed. if necessary

Notes to physician If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

Mineral Seal Oil

Section 4n First aid measures

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Specific hazards arising from the

chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media Suitable

extinguishing media

Use dry chemical, CO2, alcohol-resistant foam or water spray (fog).

Unsuitable

Do not use water jet. extinguishing media

thermal Hazardous

decomposition products

No specific data.

fire-fighters

Special protective actions for Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without

suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency ...

personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways,

drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Methods and materials for containment and cleaning up

Small spill Large spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Protective measures

<u>Precautions for safe handling</u> Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe including storage, any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Section 8. Exposure controls/personal protection

Control parameters Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated middle	ACGIH TLV (United States). TWA: 5 mg/m ³ 8 hours. Form: Oil mist, mineral STEL: 10 mg/m ³ 15 minutes. Form: Oil mist, mineral OSHA PEL (United States). TWA: 5 mg/m ³ 8 hours. Form: Oil mist, mineral

Appropriate engineering Good general ventilation should be sufficient to control worker exposure to airborne controls contaminants.

Environmental exposure Emissions from ventilation or work process equipment should be checked to ensure controls they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

. Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

- Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment Mineral Seal Oil indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead. Skin protection

Mineral Seal Oil

Section 8. Exposure controls/personal protection

Hand protection Chemical-resistant gloves complying with an approved standard should be worn at all

times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove

manufacturers.

Body protection Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by

a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or supplied-air respirator complying with an

approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product

and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state Liquid.

Color Clear and bright.

Odor No odor or slight petroleum oil like. pH . Not available.

Boiling point/boiling range Not available.

Flash point Closed cup: 122 °C (251.6°F) [Pensky-

Martens.]

Lower and upper explosive Not available.

(flammable) limits

Vapor pressure . Not available.
Vapor density Not available.

Relative density 0.85

Density lbs/gal Estimated 7.09 lbs/gal Gravity, OAPI Estimated 35 @ 60 F

Solubility Insoluble in the following materials: cold water. Viscosity Viscosity SUS Insoluble in the following materials: cold water. Kinematic ($40\,^{\circ}$ C ($104\,^{\circ}$ F)): $0.036\,\text{cm}^2/\text{s}$ ($3.6\,\text{cst}$) Estimated $3.88626210971814E-04\,\text{SUS}$ @ $104\,\text{F}$

Reactivity ... Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide

under US GHS Definition(s).

Chemical stability ... The product is stable.

Possibility of hazardous Under normal conditions of storage and use, hazardous reactions will not occur.

Section 10. Stability and reactivity

reactions

Conditions to avoid No specific data.

Incompatible materials - Reactive with oxidizing agents.

Hazardous decomposition

products

May release COX, smoke and irritating vapors when heated to decomposition.

Section '1 1 u Toxicological information

Information on toxicological effects Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum),	LD50 Dermal	Rabbit	>2000 mg/kg	
hydrotreated middle	LD50 Oral	Rat	>5000 mg/kg	

Conclusion/Summary Distillates (petroleum), hydrotreated middle: Middle distillates similar to the product represented by this MSDS have been associated with liver and kidney damage in sub

chronic (90-day) inhalation studies of male rats. In addition, certain middle distillates similar to this material have been associated with liver damage in mice. The relevance

of these findings to human health is unclear.

This material has not been determined to be carcinogenic by IARC, NTP or OSHA.

Irritation/Corrosion

Skin "No additional information.

Eyes ... No additional information.

Respiratory <u>Sensitization</u> No additional information.

Skin No additional information.

Respiratory ... No additional information.

Mutagenicity

Conclusion/Summary ... No additional information.
No additional information.

Carcinogenicity

Conclusion/Summary

Reproductive

toxicity

Mineral Seal Oil

Conclusion/Summary No additional information.

<u>Teratogenicity</u>

Conclusion/Summary .. No additional information. Specific target organ toxicity (single exposure) Not available.

<u>Specific target organ toxicity (repeated exposure)</u> Not available.

Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated middle	ASPIRATION HAZARD - Category 1

Information on the likely:Routes of entry anticipated: Oral, Dermal, Inhalation. routes of exposure

Potential acute health effects

Eye contact "No known significant effects or critical hazards."
Inhalation "No known significant effects or critical hazards."

Skin contact - Defatting to the skin. May cause skin dryness and

irritation.

Ingestion "May be fatal if swallowed and enters airways.

Symptoms related to the physical. chemical and toxicological characteristics Eye contact:No specific data. Inhalation:No specific data.

Section 11. Toxicological information

Skin contact: Adverse symptoms may include the following: irritation dryness cracking Ingestion: Adverse symptoms may include the following: nausea or vomiting

Potential chronic health effects

General: No known significant effects or critical hazards.

Carcinogenicity:No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity:No known significant effects or critical hazards. Developmental effects:

No known significant effects or critical hazards. Fertility effects: No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Conclusion/Summary Not available.

Persistence and degradability

Conclusion/Summary Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition Not available. coefficient

(Koc)

Other adverse effects No known significant effects or critical hazards.

Section 13B Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name			
Transport hazard class(es)			
Packing group			
Environmental hazards	No.	No.	No.
Additional information	Remarks Oil: The product(s) represented by this MSDS is (are) regulated as "oil" under 49 CFR Part 130. Shipments by rail or highway in packaging having a capacity of 3500 gallons or more or in a quantity greater 42,000 gallons are subject to these requirements. In addition, mixtures containing 10% or more of this product may be subject to these requirements.		

Special precautions for user Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted.

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 spills 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 EPAs National Response Center at (800) 4248802.

Composition/information on ingredients

SARA 304 RQ Not applicable.

SARA 311/312

Classification Not applicable. Composition/information on ingredients

Section 1 5n Regulatory information

Massachusetts
None of the components are listed.
New York
None of the components are listed.
New Jersey
None of the components are listed.
Pennsylvania
None of the components are listed.

International regulations

International lists Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: Not determined.

Korea inventory: All components are listed or exempted.

Malaysia Inventory (EHS Register): All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or

exempted.

Philippines inventory (PICCS): All components are listed or exempted. Taiwan

inventory (CSNN): Not determined.

Canada inventory All components are listed or exempted.
EU Inventory All components are listed or exempted.
WHMIS (Canada) Not controlled under WHMIS (Canada).

Section 16. Other information

National Fire Protection Association (U.S.A.)

Flammability

Health Instability/Reactivity Special

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials

for Emergency Response Copyright 01997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright 02001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of ___2/13/2015. revision

Key to abbreviations ...ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA =

International Air Transport Association IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,
1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United
Nations

Notice to reader

THE INFORMATION IN THIS SAFETY DATA SHEET (SDS) WAS OBTAINED FROM SOURCES WHICH WE BELIEVE

ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS OR ACCURACY. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE

ITSELF. THIS SDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS SDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR

Section 16. Other information

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, ANDIOR DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR ANY LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.