

Safety Data Sheet

**Section 1: Identification****Product Name** Hasco FM Gear Oil 460**Relevant identified uses of the substance or mixture****Recommended use** Food Grade Gear Oil

Details of the supplier of the safety data sheet

Manufacturer Hasco Oil Company Inc.
2800 Temple Ave
Long Beach, CA 90806
United States
www.hascooil.com**Telephone(General)** (562) 595-8491**Emergency telephone number** (800) 424-9300 - Chemtrec USA**Section 2: Hazard Identification****UN GHS**

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Classification of the substance or mixture**UN GHS Classification** Skin Sensitizer 1
Eye Irritant 2B**Label elements:****Signal Word****WARNING****Hazard symbol:****UN GHS Hazard Statement** May cause an allergic skin reaction
Causes serious eye irritation**Precautionary statements****Prevention:** Wash thoroughly after handling. Do not breathe dusts or mist. Wear protective gloves, eye protection, face protection, and protective clothing. Avoid release to the environment.**Response:** If on skin: wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Contaminated clothing must be washed before reuse.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists get medical attention.**Storage/Disposal:** Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

Static accumulating material can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. Keep away from heat/sparks/open flame/hot surfaces. No Smoking. Ground/Bond container and receiving equipment. These alone may be insufficient to remove static electricity.

Other information

NFPA



Section 3 - Composition/Information on Ingredients

Substances

Composition		
Chemical Name	Identifiers	%
White Mineral Oil	CAS: 8042-47-5	70% to 80%
Di-t-Butyl-p-Cresol	CAS: 128-37-0	< 0.4%
Alkyl Carboxylic Acid	Proprietary	< 0.2%
Polymer	Proprietary	15% to 20%
Vitamin E	CAS: 10191-41-0	< .005%

Section 4: First-Aid Measures

Description of first aid measures

Inhalation	First aid is not normally required. Avoid breathing vapors. If breathing difficulties develop, move away from source and seek medical attention.
Skin	Cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops and persists, seek medical attention.
Eye	If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. Remove contact lenses, if present and easy to do. If symptoms persist, seek medical attention.
Ingestion	If swallowed, rinse mouth. Do NOT induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Eyes: May cause slight irritation, tears and a burning sensation.
 Skin: Causes mild irritation, potentially causing reddening, itching or inflammation.
 Inhalation: Respiratory tract irritation may occur if exposed to fumes or mist.
 Ingestion: Symptoms may include nausea, vomiting and diarrhea.
 Aspiration into lungs may cause chemical pneumonia and lung damage

Medical attention and Special treatment needed

Treat symptomatically

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media Dry chemicals, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Unsuitable Extinguishing Media Do not use water jet

Firefighting Procedures No actions shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposing products may include the following materials: Carbon Dioxide and Carbon Monoxide. Product is a static accumulation liquid. Static accumulation liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid may cause flash fire. Static electricity accumulation may be increased by the presence of small quantities of water or other contaminants. Restrict flow velocity to avoid build-up of static charge.

Advice for firefighters

For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant. Isolate immediate hazard area, keep unauthorized personnel out. Water spray may be useful in or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear personal protective clothing and equipment to avoid direct contact.

Emergency Procedures Keep unauthorized personnel away. Ventilate closed spaces before entering. This material will burn, but will not ignite readily. Keep all ignition sources away from the spill/release. As an immediate precautionary measure, isolate spill or leak area in all directions. Stop leak if you can do it without risk.

Environmental precautions

Stop leak if you can do it without risk. Isolate spill or leak area in all directions. Product is insoluble in water, so prevent it from entering drains or water ways. Notify appropriate state and local authorities.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

LARGE SPILL: 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.

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

Section 7 - Handling and Storage

Precautions for safe handling

Handling

Avoid contact with heat and ignition sources. Avoid contact with skin and clothing. Be cautious of any drips or spills as product is extremely slippery. Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Electrostatic charge may accumulate and create a hazardous condition when handling this material. Bond and ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool, well ventilated area away from incompatible materials (see section 10). 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.

Section 8 - Exposure Controls/Personal Protection

Control parameters:

Component	ACGIH	OSHA	Other
White Mineral Oil	5mg/m TWA 10 mg/m STEL	5 mg/m	As oil mist, if generated 5 mg/m TWA

STEL – Short Term Exposure Limit (15 minutes) TWA – Time Weighted Average

Engineering Measures/Controls

Consider the following when employing engineering controls and selection personal protective equipment: Potential hazards of the material, applicable exposure limits, job activities and other substances in the work place. If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

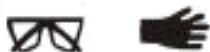
Personal Protective Equipment

Respiratory: If vapor or mist is generated by heating, spraying, etc., wear an air purifying respirator with mist filter. No special respiratory protection is normally required.

Skin: Wear gloves and long sleeve clothing to minimize contact.

Eye/Face: Wear glasses with side shield or goggles in case of splashing.

Pictograms



General Industrial Hygiene Considerations

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.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Liquid
Color	Clear, colorless to slight amber	Odor	None
Taste	Not relevant	Particulate Type	Not relevant
Particulate Size	Not relevant	Aerosol Type	Not relevant
Odor Threshold	Not relevant	Physical and Chemical Properties	Not relevant
General Properties			
Boiling Point	No Data Available	Melting Point	No Data Available
Decomposition Temperature	No Data Available	Heat of Decomposition	No Data Available
pH	Not relevant	Specific Gravity/Relative Density	~0.879 @ 60 F(15.55C)
Density	~7.322 #/gal	Bulk Density	No Data Available
Water Solubility	Insoluble	Solvent Solubility	Soluble
Viscosity	~ 460 cSt @ 40C (104F)	Explosive Properties	No Data Available
Oxidizing Properties:	No Data Available		
Volatility			
Vapor Pressure	<0.1 kPa at 20C	Vapor Density	> 1.0
Evaporation Rate	No Data Available	VOC (Wt.)	No Data Available
VOC (Vol.)	No Data Available	Volatiles (Wt.)	No Data Available
Volatiles (Vol.)	No Data Available		
Flammability			
Flash Point	>350 F (COC)	UEL	No Data Available
LEL	No Data Available	Flame Duration	No Data Available
Heat of Combustion (ΔH_c)	No Data Available	Burning Time	No Data Available
Flame Height	No Data Available	Flame Extension	No Data Available
Ignition Distance	No Data Available	Self-Accelerating Decomposition Temperature (SADT)	No Data Available
Autoignition	No Data Available	Flammability (solid, gas)	No Data Available
Environmental			
Half-Life	Not relevant	Octanol/Water Partition coefficient	Not relevant
Coefficient of water/oil distribution	Not relevant	Bioaccumulation Factor	Not relevant
Bioconcentration Factor	Not relevant	Biochemical Oxygen Demand BOD/BOD5	Not relevant
Chemical Oxygen Demand	Not relevant	Persistence	Not relevant
Degradation	Not relevant		

Section 10: Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use

Chemical stability

Stable under normal ambient and anticipated conditions of use.

Possibility of hazardous reactions

Not anticipated under normal conditions.

Conditions to avoid

Extended exposure to high temperatures can cause decomposition

Incompatible materials

Avoid contact with strong oxidizing agents

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 - Toxicological Information

Information on likely routes of exposure:

Ingestion:	May cause irritation
Inhalation:	Not expected to cause respiratory irritation
Skin Contact:	Not expected to cause skin irritation, may cause sensitization
Eye Contact:	Causes serious eye irritation

Symptoms related to physical, chemical and toxicological characteristics:

Inhalation: Not expected to be a hazard for static vapor at ambient temperatures. Inhalation of mist or spray may be harmful and cause pulmonary edema or aspiration pneumonia. Oil deposits in the lung may lead to fibrosis and reduced pulmonary function.

Skin Irritation: May cause mild skin irritation, redness, itching and inflammation. Repeated contact may cause sensitization.

Eye Damage/Irritation: May cause slight eye irritation, tears and a burning sensation

Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Mineral oil can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death.

Information on toxicological effects:

Components	Species	Test Results
White Mineral Oil	(8042-47-5)	
Dermal – LD50	Rat	>2000 mg/kg
Inhalation – LC50	Rat	>5 mg/kg
Oral – LD50	Rat	>5000 mg/kg
Skin corrosion/irritation	Not classified	
Serious eye damage/eye irritation	Eye Irritation 2	Causes serious eye irritation
Respiratory sensitization	Not classified	
Skin sensitization	Skin sensitizer 1	May cause skin sensitization in sensitive individuals
Germ cell mutagenicity	Not classified	
Carcinogenicity	Not classified	
Reproductive toxicity	Not classified	
Specific Target organ toxicity	Not classified	
Aspiration toxicity	Not classified	
Toxicological data	Mineral Oil mists from highly refined or hydro-treated oils are generally of low acute and sub-chronic toxicity. Overexposure to mists may cause inflammation of the lungs and lipid pneumonia.	

Section 12 - Ecological Information

Eco-toxicity Not classified in terms of eco-toxicity

Components	Species	Test Results
White Mineral Oil	(8042-47-5)	
<i>Acute</i>		
Algae – EC50	Algae	> 1000 mg/l, 96 hr
Crustacea – EC50	Daphnia magna	>100 mg/l, 48 hr
Fish – EC50	Fish	> 1000 mg/l
<i>Chronic</i>		
Crustacea – NOEL	Daphnia magna	1000 mg/l, 21 d
	Not readily biodegradable	

Bio-accumulative potential May bio-accumulate in aquatic organisms

Partition coefficient n-octanol/water (log Kow)

White Mineral Oil (CAS 8042-47-5) >4

Mobility in soil May partition into air, soil and water

Other adverse effects No other adverse effects expected

Section 13 - Disposal Considerations

Waste treatment methods

Product waste Avoid contact of spilled material with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.

Packaging waste Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

DOT - U.S. Department of Transportation

Shipping Description: Not regulated.

Trucking Freight description: 65 Petroleum Oil, N.O.I.B.N

Note: The provisions of 49 CFR, Part 130 apply for shipments over 3,500 bulk gallons, requiring carrier emergency plans for spills and accidents.

IATA – Int’l Air Transport Association

Not Regulated

IMDG – Int’l Maritime Dangerous Goods

Not Regulated

Annex II of MARPOL 73/78 and the IBC Code:

Not classified for MARPOL.

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

CERCLA/SARA- This material does not contain toxic chemicals (in excess of the applicable de minimis concentration) that are subject to the reporting requirements of SARA 313 (40 CFR 372)

TSCA Inventory: All the components of this product are listed on, or are automatically included as natural occurring chemical substances on, or are exempted from the requirements to be listed on the TSCA inventory.

Other Information:

CALIFORNIA PROPOSITION 65: This product does not contain a chemical currently known to the State of California to cause cancer, birth defects, or other reproductive harm at levels which are subject to the reporting requirements of SARA 302.

Section 16 - Other Information**Revision** 1**Preparation Date** June 26, 2015**Disclaimer/Statement of Liability**

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