

SAFETY DATA SHEET

Magiesol 40 Oil

Date of Preparation: 06/19/2014

SDS #: 004-16130-00MSDS

SECTION 1: IDENTIFICATION

Product Identification: Magiesol 40 Oil

CAS Number: 64742-47-8

Other Designations: None

Volumes: None

Recommended Use: Laboratory purposes, manufacture of chemicals

Restrictions: For laboratory use only.

Supplier Information:

Micromeritics Instrument Corp.
4356 Communications Drive
Norcross, GA 30093-2901 USA

Contact: Human Resources
Phone: (770) 662-3620
Fax: (770) 662-3696

Manufacturer: Magie Brothers Oil Company, 9101 Fullerton Avenue, Franklin Park, IL 60131-1089
Emergency: (800) 546-6040

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: Category 2 Skin corrosion/irritation, Category 1 Aspiration hazard, Category 3 Specific target organ toxicity, Category 2, chronic hazards to the aquatic environment

Signal word: Danger

Hazard Statements:

H315: Causes skin irritation.

H304: May be fatal if swallowed and enters airways.

H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects.

Pictograms:



Precautionary Statements:

P102: Keep out of reach of children.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	% wt
Hydrotreated light distillate	674742-47-8	100

Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Hydrotreated light distillate	none estab.	none estab.	200 mg/m ³	none estab.	none estab.	none estab.	none estab.

SECTION 4: FIRST-AID MEASURES

Inhalation: Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

Skin Contact: Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Eye Contact: Flush eyes with water while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persist transport to the nearest medical facility for additional treatment.

Ingestion: If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing. Give nothing by mouth.

Most Important symptoms and effects, acute/chronic: If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Breathing of high vapor concentrations may cause central nervous system (CNS) depression resulting in

dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.

Indication of immediate medical attention: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media: Do not use direct water jets on the burning product as they could cause a steam explosion and spread of the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Special hazards arising from the substance or mixture: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke), carbon monoxide, oxides of sulfur, unidentified organic and inorganic compounds. Will float and can be reignited on surface water. Flammable vapors may be present even at temperatures below the flash point. The vapor is heavier than air, spreads along the ground and distant ignition is possible.

Advice for firefighters: Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

Additional Advice: Keep adjacent containers cool by spraying with water. If possible remove containers from the danger zone. If the fire cannot be extinguished the only course of action is to evacuate immediately.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations. Evacuate the area of all non-essential personnel. Ventilate contaminated area thoroughly.

Personal Precautions, Protective Equipment and Emergency Procedures: May ignite on surfaces at temperatures above auto-ignition temperature. Do not breathe fumes, vapor. Do not operate electrical equipment. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area and evacuate all personnel. Attempt to disperse the gas or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment. Monitor area with combustible gas meter.

Environmental Precautions: Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Methods and Material for Containment and Cleanup: For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

Additional Advice: Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained.

SECTION 7: HANDLING AND STORAGE

General Precautions: Avoid breathing vapors or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Air-dry contaminated clothing in a well-ventilated area before laundering. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use local exhaust ventilation if there is risk of inhalation of vapors, mists or aerosols. Prevent spillages. For comprehensive advice on handling, product transfer, storage and tank cleaning refer to the product supplier.

Precautions for Safe Handling: Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Avoid inhaling vapor and/or mists. Never siphon by mouth. Avoid contact with the skin. Do not eat or drink when using. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. The vapor is heavier than air, spreads along the ground and distant ignition is possible. Electrostatic charges may be generated during handling. Electrostatic discharge may cause fire.

Conditions for safe storage, including any incompatibilities: Drum and small container storage: Drums should be stacked to a maximum of 3 high. Use properly labelled and closeable containers. Take suitable precautions when opening sealed containers, as pressure can build up during storage. Tank storage: Tanks must be specifically designed for use with this product. Bulk storage tanks should be bundled. Locate tanks away from heat and other sources of ignition. The vapor is heavier than air. Beware of

accumulation in pits and confined spaces. Vapors from tanks should not be released to atmosphere. Breathing losses during storage should be controlled by a suitable vapor treatment system.

Recommended Materials for Containers: For containers, or container linings use carbon steel and low alloy steel. Aluminum may also be used for applications where it does not present an unnecessary fire hazard. For container linings the following may also be used: Unplasticized polyvinyl chloride (U-PVC), Fluoropolymers (PTFE), Polyvinylidene fluoride (PVDF), Polyetheretherketone (PEEK), Polyamide (PA-11). For seals and gaskets use: Fluoroelastomer (FKM), Viton A, and Viton B, Nitrile butadiene (NBR), Buna-N. For coating (paint) materials use: High build, amine adduct-cured epoxy.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Controls General Information: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Use sealed systems as far as possible. Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended. Eye washes and showers for emergency use. Do not ingest. If swallowed then seek immediate medical assistance.

Personal Protective Equipment

Eye Protection: Chemical splash goggles

Hand Protection: Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. Suitability and durability of a glove is dependent on usage. Always seek advice from glove suppliers. Contaminated gloves should be replaced.

Body Protection: Chemical resistant gloves/gauntlets, boots, and apron (where risk of splashing).

Respiratory Protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.

Environmental exposure control measures: Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapor.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance and Odor: Clear liquid, slight hydrocarbon odor.

Vapor Pressure: 0.12 mm Hg at 70 °F

Vapor Density (Air=1): 6.14

Formula Weight: Not applicable

Density: Not applicable

Water Solubility: Insoluble.

Boiling Point: 390°F - 468°F

Melting Point: Pour Point = -40°F

Viscosity: Not applicable

Refractive Index: Not applicable

Surface Tension: Not applicable

% Volatile: Not applicable

Specific Gravity (H₂O=1, at 4 °C): 0.787 @ 60/60F

Evaporation Rate: <1

pH: Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Oxidizes on contact with air

Chemical Stability: Stable under normal conditions of use.

Possibility of Hazardous Reactions: Oxidizes on contact with air.

Conditions to Avoid: Avoid heat, sparks, open flames and other ignition sources.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Hazardous decomposition products are not expected to form during normal storage.

SECTION 11: TOXICOLOGICAL INFORMATION

Basis for Assessment: Information given is based on product data, a knowledge of the components and the toxicology of similar products.

Likely Routes of Exposure: Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion.

Acute Oral Toxicity: Low toxicity: LD₅₀ > 5000 mg/kg , Rat

Acute Dermal Toxicity: Low toxicity: LD₅₀ >2000 mg/kg , Rabbit

Acute Inhalation Toxicity: Low toxicity: LC₅₀ >5 mg/l / 4 h, Rat

Skin corrosion/irritation: Irritating to skin.

Serious eye damage/irritation: Expected to be slightly irritating.

Respiratory Irritation: Inhalation of vapors or mists may cause irritation to the respiratory system.

Respiratory or skin sensitization: Not a skin sensitizer.

Aspiration Hazard: Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Germ cell mutagenicity: Not considered a mutagenic hazard.

Carcinogenicity: Not classified as a carcinogen. Repeated skin contact has resulted in irritation and skin cancer in animals.

Reproductive and Developmental Toxicity: Not expected to impair fertility. Not classified as a developmental toxicant.

Specific target organ toxicity - single exposure: High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Specific target organ toxicity - repeated exposure: Kidney: caused kidney effects in male rats which are not considered relevant to humans

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Acute Toxicity: Toxic: LL/EL/IL50 > 1 <= 10 mg/l LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract.

Fish: Toxic: LL/EL/IL50 > 1 <= 10 mg/l

Aquatic crustacean: Toxic: LL/EL/IL50 > 1 <= 10 mg/l

Algae/aquatic plants: Toxic: LL/EL/IL50 > 1 <= 10 mg/l

Microorganisms: Practically nontoxic: LL/EL/IL50 > 100 mg/l

Chronic Toxicity

Fish: NOEC/NOEL expected to be > 0.01 - <= 0.1 mg/l (based on modeled data)

Aquatic crustacean: NOEC/NOEL expected to be > 0.1 - <= 1.0 mg/l

Persistence and degradability: Expected to be inherently biodegradable. The volatile constituents will oxidize rapidly by photochemical reactions in air.

Other Adverse Effects: Films formed on water may affect oxygen transfer and damage organisms.

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. Do not dispose into the environment, in drains or in water courses. Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognized collector or contractor.

Container Disposal: Send to drum recoverer or metal reclaimer. 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. Do not pollute the soil, water or environment with the waste container. Comply with any local recovery or waste disposal regulations.

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: TRANSPORT INFORMATION

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Not regulated

Shipping Symbols: Not Applicable

Hazard Class: Not regulated

ID No.: Not regulated

Packing Group: Not Applicable

Label: Not Applicable

Special Provisions (172.102):

Not Applicable

Packaging Authorizations

a) **Exceptions:** Not Applicable

b) **Non-bulk Packaging:** Not Applicable

c) **Bulk Packaging:** Not Applicable

Quantity Limitations

a) **Passenger, Aircraft, or Railcar:** Not Applicable

b) **Cargo Aircraft Only:** Not Applicable

Vessel Stowage Requirements

a) **Vessel Stowage:** Not Applicable

b) **Other:** Not Applicable

Canadian TDG Hazard Class & PIN – Not regulated

SECTION 15: REGULATORY INFORMATION

EPA Regulations:

SARA 311/312 Codes:

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

SECTION 16: OTHER INFORMATION

Prepared By: Zuniga, A.

Revision Notes: Not Applicable

Additional Hazard Rating Systems: Not Applicable

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