



Micromeritics Instrument Corp. and Micromeritics Analytical Services
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 Surface Area - Porosity - Density - Particle Size, Shape & Count - Catalytic Activity - Surface Energy - Analytical Services

Cover Sheet



INSTRUMENT CORPORATION
 ONE MICROMERITICS DR.
 NORCROSS, GA 30093-1877 U.S.A.

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|-----|----------------------|----------|----------|-----|----------|----------|---------------|
| | | | | | | DWN BY | M. Day |
| | | | | | | ENGR | G. Killip |
| | | | | | | ENGR SIG | G. Killip |
| | | | | | | HR SIG | J. Mocny |
| A | Revision | MD | 04/03/03 | | 030202 | QA SIG | A. Dovin |
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MSDS MAGIESOL 40 OIL

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| SIZE | NUMBER | PAGE |
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Micromeritics Material Safety Data Sheet

Title : MAGIESOL 40 OIL
Date of Preparation : 04/03/03

MSDS No. : 004/16130/00MSDS
Revision : A

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: MAGIESOL 40 OIL

Chemical Formula: Magiesol 40 oil

CAS Number: 64742-47-8

Other Designations:

General Use:

Supplier: Micromeritics Instrument Corp.
1 Micromeritics Dr.
Norcross, GA 30093-1877 USA

Contact: Human Resources
Phone: (770) 662-3620
Fax: (770) 662-3621

Manufacturer: Magie Brothers Oil Company, 9101 Fullerton Avenue, Franklin Park, IL 60131-1089

Emergency: (800) 546-6040

Section 2 - Composition / Information on Ingredients

| Ingredient Name | CAS Number | % wt or % vol |
|-------------------------------|-------------|---------------|
| Hydrotreated light distillate | 674742-47-8 | - |

Trace Impurities:

| Ingredient | OSHA PEL | | ACGIH TLV | | NIOSH REL | | NIOSH |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | TWA | STEL | TWA | STEL | TWA | STEL | IDLH |
| Hydrotreated light distillate | none estab. | none estab. | none estab. | none estab. | none estab. | none estab. | none estab. |
| etc... | | | | | | | |

Section 3 - Hazards Identification

☆☆☆☆☆ **Emergency Overview** ☆☆☆☆☆

HMIS
H 0
F 2
R 0
PPE†
†Sec. 8

Potential Health Effects

Primary Entry Routes:

Target Organs:

Acute Effects

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Inhalation: Avoid prolonged inhalation of mist or vapors. This product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. The permissible exposure limit (PEL) and threshold limit value (TLV) for this product as oil mist is 5 mg/m³. Exposure below 5 mg/m³ appear to be without significant health risk. The short-term exposure limit for this product as an oil mist is 10 mg/m³. Acute and chronic overexposures may be irritating to the respiratory tract. Severe intoxication may lead to drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea. See Section IX, miscellaneous, for additional information.

Eye: Avoid eye contact. This product is minimally irritating to the eyes upon direct contact. Based on testing of similar products and/or components. This product has a low vapor pressure and is not expected to present a hazard to the eyes at ambient conditions. Exposure to high concentrations of vapors may be irritating to the eyes.

Skin: Avoid skin contact. This product is minimally irritating to the skin upon direct contact. Based on testing of similar products and/or components. Prolonged or repeated contact may result in contact dermatitis which is characterized by dryness, chapping, and reddening. This condition may make the skin more susceptible to other irritants, sensitizes, and disease. Pre-existing skin conditions may make the skin more susceptible and facilitate uptake by this route. See health data section below.

Ingestion: Do not ingest. Ingestion's of small quantities is usually nonfatal unless aspiration occurs. Aspiration may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage and may be fatal. Increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. Ingestion may cause gastrointestinal distress. Severe oral intoxication will lead to intense burning of the throat and may result in drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea. Loss of consciousness and convulsions followed by death may result.

Health Data: The International Agency for research on Cancer has concluded that light and intermediate middle distillates are group 3 substances, "not classifiable as to their carcinogenicity to humans," based on inadequate human and inadequate animal evidence.

Carcinogenicity: IARC, NTP, and OSHA do not list product as a carcinogen.

Medical Conditions Aggravated by Long-Term Exposure:

Section 4 - First Aid Measures

Inhalation: This material has a low vapor pressure and is not expected to present an inhalation exposure at ambient conditions. If vapor or mist is generated when the material is heated or handled, remove victim from exposure. If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if it is available. If victim is unconscious, remove to fresh air and seek medical attention.

Eye Contact: Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists, seek medical attention.

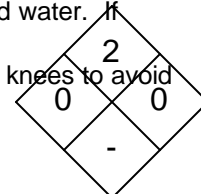
Skin Contact: Remove contaminated clothing, wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention.

Ingestion: Do not induce vomiting due to aspiration hazard. If vomiting occurs lower head below knees to avoid aspiration. Seek immediate medical attention.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians:

Special Precautions/Procedures:



Section 5 - Fire-Fighting Measures

Flash Point: 160°F

Flash Point Method: ASTM D-93

NFPA

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Burning Rate: N/A

Autoignition Temperature: 428°F ASTM E-659

LEL: 1.1%

UEL: 6.0%

Flammability Classification: 2

Extinguishing Media: Use dry chemical, foam, or carbon dioxide.

Unusual Fire or Explosion Hazards: Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

Hazardous Combustion Products:

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures:

Consult Health Effect Information in Section III, Personal Health protection Information in Section V. Fire Protection information in Section VI, and Reactivity Data in Section VII. Notify appropriate authorities of spill. Contain spill immediately. Do not allow spill to enter sewers or watercourses. Remove all sources of ignition. Absorb with appropriate inert material such as sand, clay, etc. Large spills may be picked up using vacuum pumps, shovels, buckets, or other means and placed in drums or other suitable containers.

Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Do not transfer to unmarked container. Store in a cool, well ventilated area in closed containers away from heat, sparks, open flame or oxidizing materials. This product is classified as combustible under DOT regulations. See 49 CFR 171 through 178 for shipping requirements. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106 – flammable and combustible liquids.

The threshold limit value (TLV) for petroleum distillates is 2000 mg/m³. NIOSH has recommended a 10-hr TWA of 100 mg/m³ for kerosene. Not a controlled product under the Canadian WHMIS.

This product is not known to contain any SARA title III, Section 313 reportable chemicals at or greater than 1.0% (0.1% for carcinogens). The ingredient of this product is listed on the toxic substance control act (TSCA) inventory.

DOT (BULK): Combustible liquid, NOS (Petroleum Distillates), NA1993, III

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: If vapors or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure or flammable limits.

Administrative Controls:

Respiratory Protection: Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the material is heated or handled, use an organic vapor respirator with a dust and mist filter. All respirators must be niosh certified. Do not use compressed oxygen in hydrocarbon atmospheres.

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Protective Clothing/Equipment: Eye protection is not required under conditions of normal use. If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles.
Skin Protection: No skin protection is required for single, short duration exposures. For prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, etc.) over parts of the body subject to exposure. Launder soiled clothes. Properly dispose of contaminated leather articles including shoes, which cannot be decontaminated.
Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.
Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Physical and Chemical Properties

| | |
|---|---|
| Physical State: Liquid | Water Solubility: insoluble in water. Soluble in hydrocarbons. |
| Appearance and Odor: Clear liquid, slight hydrocarbon odor. | Boiling Point: 390°F - 468°F |
| Vapor Pressure: 0.12 mm Hg at 70 °F | Melting Point: Pour Point = -40°F |
| Vapor Density (Air=1): 6.14 | Viscosity: n/a |
| Formula Weight: n/a | Refractive Index: n/a |
| Density: n/a | Surface Tension: n/a |
| Specific Gravity (H₂O=1, at 4 °C): 0.787 @ 60/60F | % Volatile: n/a |
| pH: | Evaporation Rate: <1 |

Section 10 - Stability and Reactivity

Stability: MAGIESOL 40 OIL is stable room temperature in closed containers under normal storage and handling conditions.
Polymerization: Hazardous polymerization cannot occur.
Chemical Incompatibilities: May react with strong oxidizing agents.
Conditions to Avoid: None
Hazardous Decomposition Products: None

Section 11- Toxicological Information

N/A

Section 12 - Ecological Information

N/A

Section 13 - Disposal Considerations

Disposal: All disposals must comply with Federal, State and Local regulations. The material, if spilled or discarded, may be a regulated waste. Refer to state and local regulations. Department of transportation (DOT) regulations may apply for transporting this material when spilled. Waste materials may be landfilled or incinerated at an approved facility. Materials should be recycled if possible.

Section 14 - Transport Information

See Section 7

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: C. Bills

Revision Notes:

Disclaimer: The information contained herein is based upon data available to us, and reflects our best professional judgment. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data, the results to be obtained from the use thereof, or that any such use does not infringe any patent. Since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.