

Safety Data Sheet

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Section 1. Product and Company Identification

Product Name: **Base Oil**

Other means of identification: Lubricant Base Oil

Recommended use: Blending with formulation packages for research testing

Restriction on Use: This material should not be used for any other purpose than that recommended without expert advice.

Manufacturer or supplier's detail:

Test Monitoring Center (TMC)
203 Armstrong Drive
Freeport, PA 16229 USA
412-365-1000

Email address for further information: GHS-sds@astmtmc.org

USA emergency telephone number: 1-800-424-9300 Ext. 3905

International emergency telephone number: +1 202-366-4488

Section 2. Hazards Identification

Classification of the chemical in accordance with paragraph (d) of OSHA §1910.1200

This material is not considered to be hazardous according to regulations.

GHS-Classification: Aspiration toxicant: Category 1.

Pictogram:



Signal Word: Danger

GHS Label elements, including precautionary statements:

Hazard Statements

H304: May be fatal if swallowed and enters airways.

Precautionary Statements

P301 + 310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331: Do not induce vomiting

P405: Store locked up

P501: Dispose of contents and container in accordance with local regulations.

Prevention

P264: Wash skin thoroughly after handling.

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

Response

P305 + P351 + P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue to rinse. P 337 + P313: If eye irritation persists: Get medical advice/attention.

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Other hazards which do not result in classification

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Warning: If this material is overheated, especially in the presence of water, hydrogen sulphide may be released; this can cause rapid respiratory collapse, coma and death without necessarily any warning odour being sensed.

HMIS & NFPA Classification¹:

Health: 2

Flammability: 1

Physical hazards: 0

¹ Hazard Rating: least=0, slight=1, moderate=2, high=3, extreme=4

Section 3. Composition/Information on Ingredients

This material is not considered hazardous according to GHS-Classification

Name	CAS Number	Percent by Weight
Severely Hydrotreated Heavy Paraffinic Distillates	64742-54-7	0 – 100%
Solvent Dewaxed Heavy Paraffinic Distillates	64742-65-0	0 – 100%

GHS Label elements, including precautionary statements: None.

Potential Health Effects: High pressure injection under skin may cause serious damage.

Section 4. First Aid Measures

Inhalation: Remove exposed person to fresh air if adverse effects are observed.

Ingestion: Clean mouth with water and spit. Treat symptomatically. Get medical attention.

Aspiration: Material can be aspirated into lungs during act of swallowing or vomiting. This could result in severe injury to the lungs and death.

Skin Contact: Wash contact areas with soap and water. Get medical attention if symptoms occur. If product is injected under the skin, or into any part of the body, the person is to be evaluated by a physician immediately.

Eye Contact: Flush thoroughly with water. If irritation occurs, get medical attention.

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Section 5. Fire Fighting Measures

General Fire Hazards: Standard procedures for chemical fires.

Suitable Extinguishing Media: CO₂, dry chemical or foam.

Unsuitable Extinguishing Media: Straight streams of water, as this will spread fire.

Fire Fighting: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers or drinking supply.

Firefighters should use standard protective equipment and self-contained breathing apparatus. Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Smoke, fume, aldehydes, hydrogen sulphide, sulfur, zinc and phosphorus oxides, complete combustion products, and oxides of carbon.

Flash point: > 200°C ASTM D92

Section 6. Accidental Release Measures

Land Spill: Dike far ahead of larger spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas. Pick up free liquid for recycle and/or disposal. Residual material can be absorbed with inert material.

Water Spill: Stop leak if no risk is apparent. Confine the spill immediately with booms. Warn other shipping. Remove from surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely scenario for this material; however geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

Section 7. Handling and Storage

Smoking, eating, and drinking should be prohibited in application area.

Avoid any contact with product. Prevent small spills and leakage to avoid slip hazard.

Incompatible materials and coatings: No data available.

Storage temperature: ≤ 40°C (104°F)

Do not reheat above 60°C (140°F)

Keep container closed in dry and well-ventilated area.

No decomposition if stored and applied as directed.

Keep away from incompatible materials.

Storage: The container choice, for example storage vessel, may affect static accumulation and dissipation. Do not store in open or unlabeled containers.

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Section 8. Exposure Controls/Personnel Protection

Exposure Limit Values:

Exposure limits for materials that can be formed when handling the product: When mists/aerosols can occur, the following are recommended: 5mg/m³ – AGGIH TLV (inhalable fraction), 5 mg/m³ – U.S. OSHA PEL

Note: Limits/standards shown for guidance only. Follow applicable regulations.

Engineering Controls: No special requirements under ordinary conditions of use and with adequate ventilation. Personnel Protection: No special requirements under ordinary conditions of use and with adequate ventilation.

Skin Protection: No skin protection is required under ordinary use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact. Any specific clothing or glove information is based on published literature or manufacture data.

Specific Hygiene Measures: Always observe good personnel hygiene measures, such as washing after handling material before eating, drinking and or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Aspiration: Material can be aspirated into lungs during act of swallowing or vomiting. This could result in severe injury to the lungs and death.

Eye Protection: Safety glasses with side shields are recommended.

Section 9. Physical and Chemical Properties

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent specifications. Contact supplier for additional information.

Physical State: Liquid

Form: Liquid

Color: Colorless to Dark Amber

Odor: Hydrocarbon

Odor Threshold: Not Determined

Relative Estimated Density (@15°C): 0.8 – 0.9 g/cm³ ASTM D4052

Flash Point: >200°C ASTM D92 or D93

Auto Ignition Temperature: Not Determined

Flammable Limits (approximate volume % in air): LEL 0.9 UEL 7.0

Explosive Limits: Not Determined

Boiling Point/Range: Estimated >300°C (600°F)

Vapor Density: Not Determined

Vapor Pressure: Estimated <0.1 kPa @ 20°C

Evaporation Rate: Not Determined

Decomposition Temperature: Not Determined

Solubility In Water: Negligible

Pour Point: Not Determined

Melting/Freezing Point: Not Determined

DMSO Extract by IP346: <3.0 wt% (mineral oil component)

Viscosity, kinematic: Estimated >22 mm²/s @ 40°C (104°F)

pH: Not Applicable

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Section 10. Stability and Reactivity

Stability: Material is stable under normal conditions.

Conditions to Avoid: Excessive heat. High energy sources of ignition. Reactivity: No dangerous reaction known under conditions of normal use.

Possibility of Hazardous Reactions: No hazardous to be specifically mentioned.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition: No decomposition if used as directed.

Section 11. Toxicological Information

Acute Toxicity

Route of Exposure	Conclusion/Remarks
Inhalation	
Toxicity: No data available	Minimally Toxic. Based on assessment of the components.
Irritation: No data available	Negligible hazard at ambient/normal handling temperatures.
Ingestion	
Toxicity: No data available	Minimally Toxic. Based on assessment of components.
Skin	
Toxicity: No data available	Minimally Toxic. Based on assessment of components.
Irritation: No data available	Negligible hazard at ambient/normal handling temperatures.
Eye	
Irritation: No data available	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.

Chronic/Other Effects

Severely refined new mineral oils are not considered carcinogenic.

The following ingredients are cited on the regulatory lists below: None.

1= NTP CARC 3= IAR 1 5= IARC 2B
2= NTP SUS 4= IARC 2A 6= OSHA CRAC

Section 12. Ecological Information

The following toxicity information is to be used as a guideline for the products listed in Section 1. For specific product information contact the supplier.

Ecotoxicity

Fish

Mineral Oil LC 50 (Fathead Minnow, 4 days): > 100mg/L
Phosphoric acid esters/amine salt LC 50 (Rainbow Trout, 4 days): 24mg/L
NOEC (Rainbow Trout, 4 days): 3.2 mg/L

Aquatic Invertebrates

Mineral Oil LC 50 (Water Flea (Daphnia magna), 2 days): >10,000 mg/L
LC 50 (Water Flea (Daphnia magna), 21 days): >10 mg/L
NOEC (Water Flea (Daphnia magna), 21 days): >10 mg/L

Toxicity to Aquatic Plants

Mineral Oil EC 50 (Green Algae (Scenedesmus quadricauda), 3 Days): > 100 mg/L

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Toxicity to Soil Dwelling Organisms

No data available.

Sediment Toxicity

No data available.

Toxicity to Terrestrial Plants

No data available.

Toxicity to Above-Ground Organisms

No data available.

Toxicity to Microorganisms

No data available.

Persistence and Degradability

Biodegradation

Mineral Oil Not readily degradable.

Mobility

Mineral Oil Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

Section 13. Disposal Considerations

Disposal Instructions: Treatment, storage, transportation and disposal must be in accordance with applicable Federal,

State/Provincial, and Local regulations. Emptied containers retain product residue, follow labels warnings even after container is emptied.

Contaminated Packaging: Container packaging may exhibit hazards.

Section 14. Transport Information

Land (DOT): Not Regulated for Land Transport.

Land (TDG): Not Regulated for Land Transport.

Sea (IMDG): Not Regulated for Sea Transport.

Air (IATA): Not Regulated for Air Transport.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. Review classification requirements before shipping materials at elevated temperatures.

Section 15. Regulatory Information

OSHA Hazard Communication Standard: When used for its intended purpose, this material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200

Complies with the following national/regional chemical inventory requirements:

Canada (DSL)

Philippines (PICCS)

Taiwan (TSCA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories: None

SARA 302 Extremely Hazardous Substance

SARA 304 Emergency Release Notification

SARA 311/312 Hazardous Chemical

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SARA 313 (TRI Reporting)

This product may contain chemical(s) regulated under the Superfund Amendments Reauthorization Act. For additional information contact the supplier.

The following ingredients may be contained in products listed in Section 1. For specific ingredients by product contact the supplier.

Chemical Name	CAS Number	List Citations
Highly Refined Mineral Oil	64742-54-7	17, 18
Highly Refined Mineral Oil	64742-65-0	17, 18
Trace Metals	Confidential Business Information	10

Regulatory Lists Searched				
1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 Reproductive	16 = MN RTK	
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK	
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK	
4 = OSHA	9 = TSCA 12b	14 = LA RTK	19 = RI RTK	
5 = TSCA 4	10 = CA P65 Carcinogen	15 = MI 293		

Section 16. Other Information

This Safety Data Sheet contains the following revisions: None

The information contained in this document is based upon data believed to be reliable at the time of going to press and relates to the matters specifically mentioned in this document. This information is offered to cover the Test Monitoring Center's inventory of reference oils identified in Section 1. Although the Test Monitoring Center has used information provided by their suppliers in the preparation of this information, in the absence of any overriding obligations arising under a specific contract, no representation, warranty (express or implied), or guarantee is made to the suitability, accuracy, reliability or completeness of the information; nothing in this document shall reduce the user's responsibility to satisfy itself as to the suitability, accuracy, reliability and completeness of such information for its particular use; there is no warranty against intellectual property infringement; and the Test Monitoring Center shall not be liable for any loss, damage or injury that may occur from the use of this information other than death or personal injury caused by its negligence. No statement shall be construed as an endorsement of any product or process. For greater certainty, before use of the information contained in this document, particularly if the product is used for the purpose or under conditions which are abnormal or not reasonably foreseeable, this information must be reviewed with the supplier of this information.