

Material Safety Data Sheet (MSDS)

Product Name: Heavy Liquid Paraffin Oil IP Grade

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

1101- City Centre 2,

Science City Road,

Sola Ahmedabad Gujarat,

India - 380060.

Contact No.: +91 97272 88479

Email: info@rawpharmabiz.com

Website: www.rawpharmabiz.com

1. Identification of the Substance and Company

Product Name: Heavy Liquid Paraffin Oil IP Grade

Chemical Name: Liquid Paraffin / Heavy Liquid Paraffin

Synonyms: Mineral Oil, Liquid Paraffin, Paraffinum Liquidum

CAS Number: 8042-47-5

EC Number: 232-455-8

Chemical Nature: Highly refined mixture of saturated liquid hydrocarbons obtained from petroleum and subjected to appropriate refining and purification processes.

Product Grade: IP Grade

Recommended Use:

Used as an excipient, emollient, lubricant, protective agent, pharmaceutical formulation ingredient, cosmetic ingredient, and processing aid where permitted by applicable standards.

2. Hazard Identification

GHS Classification: Heavy Liquid Paraffin Oil IP Grade is generally not classified as hazardous under the GHS when handled and used as intended.

Potential Health Effects

Inhalation: At normal temperatures, exposure to vapour is expected to be low. Oil mist generated during spraying, heating, or mechanical processing may irritate the respiratory tract.

Skin Contact: Prolonged or repeated contact may cause dryness, defatting, or mild irritation of the skin.

Eye Contact: Direct contact may cause temporary irritation, redness, watering, and blurred vision.

Ingestion: Small accidental quantities are generally expected to have low acute toxicity. Aspiration of liquid paraffin into the lungs, particularly following ingestion and vomiting, may cause serious chemical pneumonitis.

Environmental Hazards: Large releases may contaminate soil, drains, and water bodies. Avoid uncontrolled discharge into the environment.

Precautionary Statements

- Avoid prolonged or repeated skin contact.
- Avoid contact with eyes.
- Avoid breathing oil mist.
- Do not intentionally ingest.
- Keep container tightly closed.
- Use appropriate protective equipment during industrial handling.
- Prevent uncontrolled release into drains and waterways.

3. Composition / Information on Ingredients

Heavy Liquid Paraffin Oil IP Grade is a highly refined petroleum-derived product consisting predominantly of saturated liquid hydrocarbons, including paraffinic and cycloparaffinic hydrocarbons. The material is manufactured and purified to meet applicable pharmacopoeial requirements for liquid paraffin. It is not normally supplied as a single chemically defined substance; therefore, a single molecular formula is not applicable. The product is expected to contain very low levels of aromatic compounds and other impurities following appropriate refining and purification. Exact hydrocarbon composition may vary according to the source and manufacturing process.

4. First Aid Measures

Inhalation: Move the affected person to fresh air. If oil mist has been inhaled and irritation, coughing, or breathing difficulty occurs, seek medical attention.

Skin Contact: Remove contaminated clothing. Wash the affected skin thoroughly with soap and plenty of water. Seek medical attention if irritation persists.

Eye Contact: Immediately flush eyes with plenty of clean water for at least 15 minutes while keeping eyelids open. Remove contact lenses if easily possible. Seek medical attention if irritation or blurred vision persists.

Ingestion: Rinse the mouth with water. Do not induce vomiting because of the potential aspiration hazard. If a significant amount has been swallowed, obtain immediate medical advice.

Aspiration: If product enters the lungs following ingestion or vomiting, seek urgent medical attention. Aspiration may cause chemical pneumonitis and other serious pulmonary complications.

Most Important Symptoms

- Skin dryness or irritation
- Eye irritation
- Coughing from inhalation of oil mist
- Gastrointestinal discomfort
- Risk of aspiration-related lung injury following ingestion

5. Fire Fighting Measures

Suitable Extinguishing Media: Dry chemical powder, Carbon dioxide (CO₂), Alcohol-resistant or suitable foam, Water fog or fine water spray.

Unsuitable Extinguishing Media: Do not use a strong direct water jet because it may spread burning oil.

Fire Hazards: Combustible liquid. Vapours and oil mist may form flammable mixtures under appropriate conditions, particularly when the product is heated.

Hazardous Combustion Products: Combustion may produce carbon monoxide, carbon dioxide, smoke, hydrocarbons, and irritating fumes.

Protective Equipment: Firefighters should wear self-contained breathing apparatus (SCBA) and full protective clothing.

Additional Information: Cool exposed containers with water spray from a safe distance. Prevent contaminated firefighting water from entering drains or natural waterways.

6. Accidental Release Measures

Personal Precautions:

- Stop the source of leakage if it can be done safely.

- Avoid direct contact with the product.
- Avoid slipping hazards caused by spilled oil.
- Ensure adequate ventilation.
- Keep unnecessary personnel away from the spill area.

Environmental Precautions: Prevent the product from entering drains, sewers, soil, rivers, lakes, and groundwater.

Cleanup Methods: Contain the spill using sand, earth, vermiculite, or another suitable non-combustible absorbent material. Collect the absorbed material into suitable, labelled containers for disposal. Large spills should be recovered using appropriate pumping or collection equipment where safe. Clean the affected area thoroughly after removal.

7. Handling and Storage

Handling

- Handle in accordance with good industrial hygiene practices.
- Avoid prolonged or repeated skin contact.
- Avoid contact with eyes.
- Avoid breathing oil mist or aerosol.
- Wash hands thoroughly after handling.
- Do not eat, drink, or smoke while handling the product.
- Keep containers closed when not in use.
- Avoid unnecessary heating or generation of oil mist.

Storage

Store in tightly closed, clean, dry containers in a cool and well-ventilated area.

Protect from direct sunlight, excessive heat, ignition sources, moisture, and incompatible materials.

Keep away from strong oxidizing agents.

Recommended storage temperature: 15°C–30°C.

8. Exposure Controls / Personal Protection

- **Engineering Controls:** Provide adequate general ventilation. Local exhaust ventilation should be used where oil mist or aerosol may be generated.
- **Respiratory Protection:** Under normal handling conditions, respiratory protection is generally not required. Where oil mist or aerosol may exceed applicable occupational exposure limits, use a suitable particulate/mist respirator or other approved respiratory protection.

- **Eye Protection:** Wear safety glasses with side shields or chemical splash goggles where splashing is possible.
- **Hand Protection:** Wear suitable protective gloves, particularly during prolonged or repeated contact.
- **Skin Protection:** Use suitable protective clothing and footwear where prolonged contact or significant spillage may occur.
- **Hygiene Measures:** Wash hands and exposed skin thoroughly after handling. Remove contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties

Appearance: Clear, colourless to nearly colourless oily liquid

Odor: Odourless or practically odourless

Physical State: Liquid

Colour: Colourless to pale yellow

pH: Not applicable / practically neutral

Solubility in Water: Insoluble or practically insoluble

Solubility in Organic Solvents: Soluble in many non-polar organic solvents

Relative Density: Typically approximately 0.82–0.89 at 20°C, depending on grade

Viscosity: High; varies according to IP grade and product specification

Flash Point: Typically above 150°C; exact value depends on grade

Boiling Range: High boiling range; may decompose before a defined boiling point is observed

Pour Point: Depends on product grade

Auto-Ignition Temperature: Not readily determined; may vary according to composition

Vapour Pressure: Very low at ambient temperature

Vapour Density: Not applicable / very low volatility

Explosive Properties: Not explosive under normal conditions

Oxidizing Properties: Not oxidizing

10. Stability and Reactivity

Reactivity: No significant hazardous reactivity is expected under recommended storage and handling conditions.

Chemical Stability: Stable under normal ambient temperature and pressure conditions.

Conditions to Avoid:

- Excessive heat
- Open flames and ignition sources
- Prolonged exposure to high temperatures
- Generation of oil mist or aerosol
- Strong oxidizing conditions

Incompatible Materials: Strong oxidizing agents such as concentrated nitric acid, peroxides, and other powerful oxidants.

Hazardous Reactions: No hazardous polymerization is expected.

Hazardous Decomposition Products: Thermal decomposition or combustion may produce carbon monoxide, carbon dioxide, smoke, hydrocarbons, and irritating fumes.

11. Toxicological Information

Acute Toxicity: Highly refined liquid paraffin is generally considered to have low acute toxicity by normal occupational exposure routes.

Skin Effects: Repeated or prolonged contact may remove natural skin oils and cause dryness, cracking, or mild irritation.

Eye Effects: Direct contact may cause temporary irritation, watering, redness, or blurred vision.

Inhalation: Inhalation of oil mist or aerosol may irritate the respiratory tract. Prolonged exposure to high concentrations of oil mist should be avoided.

Ingestion: Ingestion may cause gastrointestinal discomfort. The major concern following ingestion is aspiration into the lungs, which may result in chemical pneumonitis.

Sensitization: Not expected to be a significant skin sensitizer under normal conditions, although individual sensitivity may vary.

Carcinogenicity: Highly refined mineral oils meeting applicable pharmaceutical quality standards are not expected to present a significant carcinogenic hazard when used as intended.

Mutagenicity: No significant mutagenic effects are expected for highly refined pharmaceutical-grade liquid paraffin under intended conditions of use.

Reproductive Toxicity: No significant reproductive toxicity is expected under normal intended use.

12. Ecological Information

Ecotoxicity: Large quantities released into the environment may have physical effects on aquatic organisms by coating surfaces and reducing oxygen transfer.

Persistence and Degradability: Mineral hydrocarbon oils may degrade slowly in the environment. Biodegradation depends on the specific hydrocarbon composition and environmental conditions.

Bioaccumulative Potential: Some hydrocarbon components may have potential for bioaccumulation; however, the product is a highly refined mineral oil.

Mobility: The product is practically insoluble in water and may remain on soil or water surfaces following a spill.

Environmental Precautions: Prevent release into drains, sewage systems, surface water, groundwater, and soil.

13. Disposal Considerations

Dispose of waste product, contaminated absorbents, and contaminated packaging in accordance with applicable local, regional, and national regulations.

Do not discharge liquid paraffin into drains, sewers, soil, or natural waterways.

Where possible, recover uncontaminated product for reuse. Waste material should be handled by an authorized waste management facility.

Empty containers may retain product residues and should be handled with appropriate precautions. Do not reuse containers for other purposes unless properly cleaned and approved for reuse.

14. Transport Information

Heavy Liquid Paraffin Oil IP Grade is generally not classified as dangerous goods for transport under ADR/RID, IMDG, ICAO, or IATA when transported in standard commercial packaging and under normal conditions. However, the product is a combustible hydrocarbon oil and should be transported with appropriate precautions to prevent leakage, contamination, excessive heating, and physical damage to containers.

UN Number: Not regulated under normal transport conditions.

UN Proper Shipping Name: Not regulated.

Transport Hazard Class: Not regulated.

Packing Group: Not applicable.

Environmental Hazard: Not generally classified as an environmentally hazardous substance for transport.

Marine Pollutant: Not classified as a marine pollutant under normal transport classification.

Road Transport (ADR/RID): Transport the product in clean, dry, properly closed and suitably labelled HDPE drums, plastic containers, metal containers, or other approved packaging compatible with mineral oil. Containers should be securely fastened to prevent movement, tipping, leakage, or physical damage during transit. Vehicles should be kept away from unnecessary sources of heat and ignition. Avoid prolonged exposure to direct sunlight and extreme temperatures. In the event of leakage, isolate the affected area and prevent the material from entering drains, sewers, soil, or surface water.

Sea Transport (IMDG): The product is generally not regulated as dangerous goods under the IMDG Code when shipped in standard commercial quantities and packaging. Containers should remain tightly closed and protected from seawater, excessive humidity, direct sunlight, high temperatures, and mechanical damage. Packages should be properly secured to prevent movement during loading, unloading, and ocean transportation. Any spill or leakage should be contained immediately to prevent environmental contamination.

Air Transport (IATA/ICAO): Heavy Liquid Paraffin Oil IP Grade is generally not classified as dangerous goods for air transportation when packaged and shipped in accordance with applicable requirements. Use strong, leak-proof, compatible packaging suitable for air transport. Containers should be securely closed and protected against accidental opening, pressure changes, impact, and rough handling. Follow the requirements of the applicable airline and current IATA/ICAO regulations.

Special Transport Precautions:

- Keep containers tightly sealed during transportation.
- Protect containers from physical damage and leakage.
- Avoid direct sunlight and excessive heat.
- Keep away from open flames, sparks, and unnecessary ignition sources.
- Prevent contamination of the product.
- Use packaging compatible with mineral oil.
- Secure containers properly during loading and transportation.
- Do not transport damaged or leaking containers.
- Prevent spilled material from entering drains, sewers, soil, and waterways.
- Clean up transportation spills promptly using suitable absorbent material.
- Personnel handling significant spills should use suitable gloves, eye protection, and protective clothing.
- Follow all applicable local, national, and international transport regulations.

Transport in Bulk According to MARPOL Annex II and IBC Code: Not normally applicable to packaged pharmaceutical-grade Heavy Liquid Paraffin Oil. Bulk transportation, if undertaken,

should be performed only in suitable vessels or tanks designed and approved for petroleum-derived hydrocarbon products and in accordance with applicable maritime regulations.

Emergency Transport Information: In case of accidental leakage during transportation, stop the source of leakage if it is safe to do so. Keep unauthorized personnel away from the affected area and eliminate unnecessary ignition sources. Prevent the product from entering drains, sewers, soil, rivers, lakes, and other waterways. Contain the spill using sand, earth, vermiculite, or another suitable absorbent material. Recover the material into appropriate labelled containers. Avoid direct skin and eye contact and avoid creating oil mist. If a large spill occurs, notify the relevant emergency and environmental authorities according to applicable local regulations.

15. Regulatory Information

- Heavy Liquid Paraffin Oil IP Grade should be handled and supplied in accordance with applicable pharmaceutical, occupational safety, environmental, storage, and transportation regulations.
- The product is intended for pharmaceutical and related applications where it complies with applicable Indian Pharmacopoeia (IP) requirements.
- Users are responsible for ensuring compliance with applicable local, state, national, and international regulations governing the use, storage, handling, transportation, and disposal of the product.

16. Other Information

The information contained in this Material Safety Data Sheet is based on information considered appropriate for Heavy Liquid Paraffin Oil IP Grade and is intended to provide guidance for safe handling, storage, transportation, and disposal.

The physical and chemical properties may vary within the limits of the applicable product specification and pharmacopoeial requirements. Users should refer to the current Product Specification, Certificate of Analysis, and applicable pharmacopoeial requirements before use.

This MSDS is intended as a safety guidance document and does not constitute a warranty, guarantee, or representation regarding product quality or suitability for a particular application. The user is responsible for determining the suitability of the product for the intended use and for complying with all applicable laws and regulations.

- **MSDS Generate Date:** 20-05-2017
- **Revision Date:** 30-12-2024
- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.