

Safety Data Sheet

SECTION 1: Identification

Contact information

General



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Emergency telephone number Chemtrec (24-hour availability):
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+1 (703) 527-3887 (International; collect calls accepted)

Product identifier Mineral Oil (White petrolatum); White Mineral Oil (Petroleum)
Product number 30300275
Trade name Not available
Chemical family Aromatic Hydrocarbons
Recommended uses and restrictions Reagent for research and development purposes only.
Note This SDS is written to address potential worker health and safety issues associated with the handling of the formulated product/mixture. Workers manufacturing this product/mixture should consult the SDS of each hazardous ingredient for hazard information and handling recommendations. This SDS will be revisited if more data become available.

SECTION 2: Hazard(s) identification

Classification of the substance or mixture Not classified

Label elements

GHS Hazard pictograms Not applicable
GHS Signal word Not applicable
GHS Hazard statements Not applicable
GHS Precautionary statements Not applicable

Other hazards Oral or inhalation exposure to lipid-like products can induce exogenous lipid pneumonia in adults. In a retrospective study, 4 of 44 cases were associated with inhalation exposure to mineral oil products in occupational settings.

Note This substance does not meet criteria for classification under GHS as implemented by Regulation EC No 1272/2008 (EU CLP), WHMIS 2015 (Health Canada), and Hazard Communication Standard No. 1910.1200 (US OSHA). Nevertheless, it should be handled with caution as it has not yet been fully tested.

SECTION 3: Composition/Information on ingredients

Ingredient	CAS number	EINECS/ELINCS#	Amount	GHS classification
Mineral Oil (White petrolatum) (Main constituent)	8042-47-5	232-455-8	≈ 100 %	Not classified

Note The substance listed above is not classified, but is listed because it has OELs and the toxicological properties have not yet been fully characterized.

SECTION 4: First-aid measures

Description of first aid measures

Immediate medical attention and special treatment, if necessary No. If exposed or concerned, get medical advice/attention.

Inhalation

Immediately move exposed subject to fresh air. If not breathing, give artificial respiration. If breathing is labored, administer oxygen. Immediately notify medical personnel and supervisor.

Skin contact	Wash exposed area with soap and water and remove contaminated clothing/shoes. If irritation occurs or persists, notify medical personnel and supervisor.
Eye contact	If easy to do, remove contact lenses, if worn. Immediately flush eyes with copious quantities of water for at least 15 minutes. If irritation occurs or persists, notify medical personnel and supervisor.
Ingestion	If swallowed, call a physician immediately. Do not induce vomiting unless directed by medical personnel. Do not give anything to drink unless directed by medical personnel. Never give anything by mouth to an unconscious person. Notify medical personnel and supervisor.
Most Important Symptoms/Effects	Medical conditions aggravated by exposure: None known or reported. Treat symptomatically and supportively.
Expected Symptoms/Effects, Acute and Delayed	See Sections 2 and 11

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Use water spray (fog), foam, dry powder, or carbon dioxide, as appropriate for surrounding fire and materials.

Specific hazards arising from the chemical No information identified. May emit carbon monoxide, carbon dioxide, oxides of nitrogen and other nitrogen- and sulfur-containing compounds.

Fire hazard No information identified.

Explosion hazard No information identified.

Special protective equipment and precautions for fire-fighters

Firefighting instructions In case of fire in the surroundings: use the appropriate extinguishing agent. Wear full protective clothing and an approved, positive pressure, self-contained breathing apparatus. Decontaminate all equipment after use.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Protective equipment If product is released or spilled, take proper precautions to minimize exposure by using appropriate personal protective equipment (see Section 8). Area should be adequately ventilated.

Emergency procedures Do not breathe vapors/mist/spray.

Environmental precautions Do not empty into drains. Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for cleaning up DO NOT CAUSE MATERIAL TO BECOME AIRBORNE. For small spills, soak up material with absorbent, e.g. paper towels. For large spills, cordon off spill area and minimize the spreading of spilled material. Soak up material with absorbent. Collect spilled material, absorbent, and rinse water into suitable containers for proper disposal in accordance with applicable waste disposal regulations (see Section 13). Decontaminate the area twice with an appropriate solvent.

Other information Dispose of materials or solid residues at an authorized site.

Reference to other sections See Sections 8 and 13 for more information.

SECTION 7: Handling and storage

Precautions for safe handling Follow recommendations for handling bulk formulated biochemical reagents (i.e. use of engineering controls and/or other personal protective equipment if needed). Avoid contact with eyes, skin and other mucous membranes. Wash thoroughly after handling. Do not breathe vapor/mist/spray.

Conditions for safe storage, including any incompatibilities

Storage conditions Store at room temperature.

Storage temperature 20 – 25 °C

Specific end use(s) Research and development.

SECTION 8: Exposure controls/personal protection

Note Wash hands, face and other potentially exposed areas immediately in the event of physical contact.

Control parameters/Occupational Exposure Limits

Name	Issuer	Value
Mineral Oil (White petrolatum)	ACGIH TWA (mg/m ³)	5 mg/m ³ (inhalable fraction, pure and highly refined)

Appropriate engineering controls	Control exposures to below the OEL(s). Selection and use of containment devices and personal protective equipment should be based on a risk assessment of exposure potential. Use local exhaust and/ or enclosure at aerosol/mist-generating points. Use engineered local exhaust ventilation (LEV) and/or enclosure for procedures where aerosolization may occur such as opened transfers, pumping, and spraying. All containers for solutions and slurries must be covered while being transferred.
Respiratory protection	Choice of respiratory protection should be appropriate to the task and the level of existing engineering controls. At a minimum, a tight-fitting full-face respirator with HEPA filters is required when performing aerosol-generating operations. A powered air-purifying respirator (PAPR) with HEPA filters and head cover is required for spill cleanup.
Hand protection	Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent
Eye protection	Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available.
Skin and body protection	Wear disposable coveralls appropriate to the task, booties, two pairs of gloves and safety glasses with side shields. Protective garments (coveralls, disposable coveralls, lab coats) are not to be worn in common areas (e.g., cafeterias) or out-of-doors. Employees must be trained in proper gowning and degowning practices. An anteroom or transition area must be used for gowning and degowning.
Other protective measures	Wash hands in the event of contact with this substance, especially before eating, drinking or smoking. Protective equipment is not to be worn outside the work area (e.g., in common areas or out-of-doors).
Environmental exposure controls	Avoid release to the environment and operate within closed systems wherever practicable. Air and liquid emissions should be directed to appropriate pollution control devices. In case of spill, do not release to drains. Implement appropriate and effective emergency response procedures to prevent release or spread of contamination and to prevent inadvertent contact by personnel.

SECTION 9: Physical and chemical properties

Physical state	Liquid (viscous)
Appearance	Clear
Formula	Varies
Molecular mass	480-500
Color	Clear, colorless.
Odor	Characteristic odor.
Odor threshold	No data available
pH	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butyl acetate=1)	No data available
Flammability (solid, gas)	No data available
Vapor pressure	No data available
Relative vapor density at 20 °C	No data available
Relative density	No data available
Solubility	Insoluble in water.
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosion limits	No data available
Explosive properties	No data available
Oxidizing properties	No data available

SECTION 10: Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use.
Conditions to avoid	None under recommended storage and handling conditions (see section 7).
Incompatible materials	No data available

SECTION 11: Toxicological information

Note	The toxicological properties of this substance have not been fully characterized.	
Likely routes of exposure	May be absorbed by inhalation, skin contact and ingestion.	
Toxicological information		
Acute toxicity		
Component	Type	Dose
Mineral Oil (White petrolatum)	LD50 oral (rat)	> 5000 mg/kg
	LD50 oral (mouse)	> 5000 mg/kg
	LD50 dermal (rabbit)	> 3000 mg/kg
Additional information	The acute toxicity of highly refined mineral oils is relatively low. With increasing chain length, they are less readily absorbed and metabolized after ingestion.	
Serious eye damage/irritation	Mineral oil was not considered irritating to eyes in rabbits.	
Skin corrosion/irritation	Mineral oil was not considered irritating to skin in rabbits.	
Sensitization	Mineral oil was not considered to be a sensitizer in guinea pigs.	
STOT-single exposure	Mild inflammatory reactions occurred in the lungs of mice following inhalation exposure to concentrations of 200 mg/m ³ for 4 hours.	
STOT-repeated exposure	Rat NOAEL (oral) = 1600 mg/kg/day; Rat LOAEL (oral) = 160 mg/kg/day. Target organs: Lungs, tracheobronchial lymph nodes In long-term studies with rats and dogs, mineral oils induced adverse effects in the lungs (microgranulomas) at inhalation concentrations of ≥100 mg/m ³ .	
Reproductive toxicity	In a study (OECD Test Guideline 421) in rats, no adverse effects on reproduction were found compared to untreated control animals after dermal application of 1 ml white mineral oil/kg body weight and day (about 850 mg/kg body weight).	
Developmental toxicity	White mineral oil was not associated with any adverse effects on embryo development in rats administered oral doses of up to 5000 mg/kg body weight, or after inhalation exposure to a concentration of 1000 mg/m ³ .	
Genotoxicity	<i>In vitro</i> : mineral oil was negative in bacterial Ames reverse mutation assay. Highly refined mineral oils were not found to be genotoxic in mouse lymphoma tests, bone marrow cytogenetic tests and micronucleus tests (no other details specified).	
Carcinogenicity	In long-term studies with highly refined mineral oils in rats and dogs, tumor incidence was not increased following exposure to doses/concentrations of 100 mg/m ³ . No treatment-related tumors were found after oral administration, dermal application, or subcutaneous and intraperitoneal injection. This substance is not listed by NTP, IARC, ACGIH, or OSHA as a carcinogen.	
Aspiration hazard	No data available	
Experience with humans	See "Section 2 - Other Hazards".	

SECTION 12: Ecological information

Toxicity		
Component	Type	Concentration
Mineral Oil (White petrolatum)	LC50 (96h) - <i>Pimephales promelas</i> (Fathead minnow)	> 100 mg/kg
	LC50 (48h) – <i>Daphnia magna</i> (Water flea)	> 100 mg/kg
Persistence and degradability	May persist in the environment.	
Bioaccumulative potential	No data available	
Mobility in soil	Not likely mobile due to low water solubility.	
Results of PBT assessment	No data available	
Other adverse effects	No data available	
Note	The environmental characteristics of this substance have not been fully investigated. Releases to the environment should be avoided.	

SECTION 13: Disposal considerations

Waste treatment methods

Used product should be disposed of according to local, state, and federal regulations. All wastes containing the material should be properly labeled. Dispose of wastes in accordance to prescribed federal, state, and local guidelines, e.g, appropriately permitted chemical waste incinerator. Rinse waters resulting from spill cleanups should be discharged in an environmentally safe manner, e.g, appropriately permitted municipal or on-site wastewater treatment facility.

SECTION 14: Transport information

Transport	Based on the available data, this substance is not regulated as a hazardous material/dangerous good under EU ADR/RID, US DOT, Canada TDG, IATA, or IMDG.
UN number	None assigned.
UN proper shipping name	None assigned.
Transport hazard class(es) (DOT)	None assigned.
Packing group	None assigned.
Marine pollutant	Based on the available data, this substance is not regulated as an environmental hazard or a marine pollutant.
Special transport precautions	Avoid release to the environment.
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This SDS generally complies with the requirements listed under current guidelines in the US, EU and Canada. Consult your local or regional authorities for more information.
Chemical safety assessment	No chemical safety assessment has been carried out.
TSCA	All components of this product are listed as active, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.
SARA Section 313 - Emission Reporting	This substance or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
California Proposition 65	California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.
Additional information	No additional information available

SECTION 16: Other information

Full text of H phrases and GHS classification	Not applicable
Data sources	Information from published literature and internal company data.
Abbreviations and acronyms	ACGIH - American Conference of Governmental Industrial Hygienists; ADR/RID - European Agreement Concerning the International Carriage of Dangerous Goods by Road/Rail; AIHA - American Industrial Hygiene Association; CAS# - Chemical Abstract Services Number; CLP - Classification, Labelling, and Packaging of Substances and Mixtures; DNEL - Derived No Effect Level; DOT - Department of Transportation; EINECS - European Inventory of New and Existing Chemical Substances; ELINCS - European List of Notified Chemical Substances; EU - European Union; GHS - Globally Harmonized System of Classification and Labeling of Chemicals; IARC - International Agency for Research on Cancer; IDLH - Immediately Dangerous to Life or Health; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; LOEL - Lowest Observed Effect Level; LOAEL - Lowest Observed Adverse Effect Level; NIOSH - The National Institute for Occupational Safety and Health; NOEL - No Observed Effect Level; NOAEL - No Observed Adverse Effect Level; NTP - National Toxicology Program; OEL - Occupational Exposure Limit; OSHA - Occupational Safety and Health Administration; PBT - Persistent, Bioaccumulative, and Toxic; PNEC - Predicted No Effect Concentration; SARA - Superfund Amendments and Reauthorization Act; STOT - Specific Target Organ Toxicity; STEL - Short Term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System
Issue date	27 October 2021
Current revision	1.0
Indication of changes	This is the first version of this SDS.

Disclaimer

The above information is based on data available to us and is believed to be correct. Since the information may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use and all persons receiving it must make their own determination of the effects, properties and protections which pertain to their particular conditions. No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the materials, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material because it is a biochemical reagent. The above information is offered in good faith and with the belief that it is accurate. As of the date of issuance, we are providing all information relevant to the foreseeable handling of the material. However, in the event of an adverse incident associated with this product, this Safety Data Sheet is not, and is not intended to be, a substitute for consultation with appropriately trained personnel.