



Safety Data Sheet

1. PRODUCT IDENTIFICATION

Name	Odourless Mineral Spirits
Synonyms	isoparaffinic hydrocarbon; hydrotreated aliphatic petroleum naphtha
CAS#	64742-48-9 or 64742-47-8 & others
Europe EC#	265-150-3 or 265-149-8
Product Uses	odourless hydrocarbon solvent, light lubricant, “vanishing” oil

2. HAZARDS

Canada – WHMIS

Key:

B 3

B 2 – Flash Point <38°C, B 3 – Flash Point >38°C & <93°C

D 1 – Immediately Toxic, D 2 – Chronic Toxicity

C – Oxidising Substance, E – Corrosive, F – Reactive Substance



GHS Symbols

GHS Class (Category)

aspiration (2)

flammable (3)

Signal Words

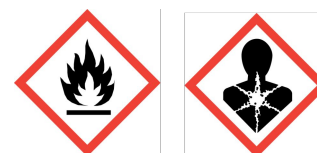
WARNING

WARNING

Hazard Statements

may be harmful if swallowed & enters airways (H305)

flammable liquid and vapour (H226)



3. COMPOSITION

	%	TWAEV / TLV mg/m ³	LD ₅₀ (mg/kg) ORAL	LD ₅₀ (mg/kg) SKIN	LC ₅₀ ppm INHALATION
Odourless Mineral Spirits	100%	175 / 1200	>5000	>2000	>5200

4. FIRST AID

SKIN:	Wash with soap & plenty of water. Remove contaminated clothing and do not reuse until thoroughly laundered.
EYES:	Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there is irritation.
INHALATION:	Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION:	Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

Inadvertent inhalation of vomited material may seriously damage the lungs. The danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity substance. The stomach should only be emptied under medical supervision, and after the installation of an airway to protect the lungs.

Please ensure that this MSDS is given to, and explained to people using this product.

5. FIRE FIGHTING & FLAMMABILITY

Flash Point	above 50°C / 122°F (closed cup)
Autoignition Temperature	350°C / 660°F
Flammable Limits	1.2% – 9.3%
Combustion Products	carbon monoxide, nitrogen oxides, smoke, part oxidised hydrocarbon fragments
Firefighting Precautions	foam, dry chemical, water fog or spray to cool, product floats on water – water jet spreads flames; firefighters must wear SCBA
Static Charge Accumulation	readily accumulates a static charge on agitation or pumping

6. ACCIDENTAL RELEASE MEASURES

Leak Precaution	dyke to control spillage and prevent environmental contamination
Handling Spill	ventilate contaminated area; recover free liquid with suitable pumps; absorb residue on an inert sorbent, sweep, shovel & store in closed containers for recycling or disposal

7. HANDLING & STORAGE

Store in a cool environment, away from sources of ignition, heat and oxidising agents.

This product is a static accumulator, but its flash point is high & accidental ignition is unlikely. Nevertheless, ground or electrically bond the source container, receiving container and transfer pump before transferring contents. Avoid splashing by keeping the product nozzle below the surface in the receiving container. Empty containers may contain a flammable or explosive vapour. Always ensure that containers, whether empty or full, or part full, are tightly sealed unless in use.

Avoid generating or breathing product vapour or mist. If vapour or mist form in use, install adequate ventilation to meet limits for oily mists (see Part 8, below).

Never cut, drill, weld or grind on or near this container. Avoid contact with skin and wash work clothes frequently. An eye bath and safety shower must be available near the workplace.

8. EXPOSURE CONTROL & PERSONAL PROTECTION

No listing for this product; limits for Mineral Oil Mist:

Ontario TWAEV	5mg/m ³	STEV	10mg/m ³
ACGIH TLV	not listed	STEL	not listed
OSHA PEL	5mg/m ³		not listed
NIOSH	5mg/m ³	STEL	10mg/m ³

For Hydrotreated Kerosene (similar product):

Ontario TWAEV	200mg/m ³	STEV	not listed
ACGIH TLV	200mg/m ³	STEL	not listed

Ventilation	engineering procedures should be in place to prevent mist formation; if mist forms in use, install local point source exhaust ventilation
Hands	no special protective gloves required; “Viton” gloves may be worn
Eyes	safety glasses with side shields – <i>always protect the eyes</i>
Clothing	no special protective clothing required

9. PHYSICAL PROPERTIES

Odour & Appearance	clear, colourless liquid with almost no odour
Odour Threshold	not known – <i>odour is no guide to the presence of spilled product</i>
Vapour Pressure	0.8mmHg / 0.1kPa (20°C / 68°F)
Evaporation Rate (<i>Butyl Acetate = 1</i>)	0.1
Vapour Density (air = 1)	~5

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9. PHYSICAL PROPERTIES, cont'd

Boiling Range	170-205°C / 338-401°F
Freezing Point	-60°C / -76°F
Specific Gravity	0.76 (20/20°C)
Water Solubility	~1 milligram per litre 20°C / 68°F
Also soluble in	most organic solvents, low solubility in glycols, methanol, ethanol
Partition Coefficient (Octanol/H ₂ O)	2-6 – <i>typical range for mineral naphthas</i>
Viscosity	1.84centistokes (25°C / 77°F)
pH	none – (<i>does not liberate hydrogen ions when dissolved</i>)
Molecular Weight	150grams per mole (<i>approximately</i>)
Conversion Factor	1ppm = 6.85mg/m ³ (<i>approximately</i>)

NOTE: The above physical properties are adapted from actual sales specifications, and not from the general specifications of CAS# 64742-48-9 & CAS# 64742-47-8.

10. REACTIVITY

Dangerously Reactive With	strong oxidising agents
Also Reactive With	none known
Stability	stable; will not polymerize
Decomposes in Presence of	not known
Decomposition Products	none apart from Hazardous Combustion Products
Sensitive to Mechanical Impact	no

11. TOXICITY**Effects, Acute Exposure**

Skin Contact	may be slightly irritating on long exposure
Skin Absorption	slight; no toxic effects likely by this route
Eye Contact	may be slightly irritating
Inhalation	may irritate but low vapour pressure makes this action unlikely; high vapour concentrations (<i>eg: by heating product</i>) may cause central nervous depression
Ingestion	ingestion of 100+ml may cause transient diarrhoea – not a route of industrial exposure

Effects, Chronic Exposure

General	prolonged exposure may exacerbate existing dermatitis; in rats, ingestion of 2500-5000mg/kg/day for 13 weeks caused changes in blood, liver, kidneys & adrenal gland; <i>not relevant to industrial exposure</i>
Sensitising	not a sensitiser in humans or animals
Carcinogen/Tumorigen	not considered a tumorigen or a carcinogen in humans or animals
Reproductive Effect	no known effect in humans or animals
Mutagen	no known effect on humans or animals
Synergistic With	not known
LD ₅₀ (oral)	>5000, >6000 & >15,000mg/kg (rat) – <i>no mortality at 2 lower doses; @ 15,000mg/m³, not stated</i>
LD ₅₀ (skin)	>2000 & >3160mg/kg (rabbit) – <i>no mortality in these tests</i>
LC ₅₀ (inhalation)	>5200, >8500 & >12,000mg/m ³ (rat) – <i>no mortality in these tests</i>

12. ECOLOGICAL INFORMATION

Bioaccumulation	poorly absorbed; not a bioaccumulator
Biodegradation	biodegrades in the presence of oxygen; rate of biodegradation varies widely: 30% in 3days, 42% in 21days, 99% in 28days; similar products have also shown lower rates 2% to 12% in 28 days
Abiotic Degradation	not known – will not photolyse directly; attacked by airborne hydroxyl radicals; for hydrocarbons of similar carbon chain length & configuration, ½-life in air 0.5-2.0 days
Mobility in soil, water	this product is water insoluble and cannot move readily in soil and water

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12. ECOLOGICAL INFORMATION, cont'd

Aquatic Toxicity	(Data for CAS# 64742-48-9 & 64742-47-8 are combined below.)
LC ₅₀ (Fish, 96hr)	18-19, 45, 2200 & >10,000mg/litre (Pimephelas promelas), 1740mg/litre (Lepomis macrochirus) >8000mg/litre (Tilapia mossambica)
EC ₅₀ (Crustacea, 48hr)	4720mg/litre (Dendronereides heteropoda), 4.3mg/litre (Crangon crangon), 2.6mg/litre (Chaetogammarus marinus)
EC ₅₀ (Algae)	no data
EC ₅₀ (Bacteria)	no data

Aquatic toxicity data vary widely. This may be due to the very low water solubility & the methods used to mix the product with water.

13. DISPOSAL

Waste Disposal **do not flush to sewer**, recycle solvent if possible, may be incinerated in approved facility
 Containers **Drums** should be reused. Recondition and pressure test by a licensed reconditioner prior to re-use.
Pails must be vented and thoroughly dried prior to crushing and recycling.
IBCs (intermediate bulk containers): polyethylene bottle must be pressure tested & recertified at 30 months. Replace at 60 months (5yrs). Steel containers must be inspected, pressure tested & recertified every 5 years.
Never cut, drill, weld or grind on or near this container, even if empty

14. TRANSPORT CLASSIFICATION

Canada TDG	PIN	UN-1268
AND	Shipping Name	PETROLEUM PRODUCTS N.O.S. (naphtha)
U.S.A. 49 CFR	OR	PETROLEUM DISTILLATES N.O.S. (naphtha)
Marine Pollutant	Class & Packing Group	3 (III)
ERAP Required		not a marine pollutant
		NO

**EMERGENCY INFORMATION**

Canada	Call CANUTEC (collect)	(613) 996-6666
U.S.A.	Call CHEMTREC	(800) 424-9300

15. REGULATIONS

Canada DSL	on inventory
U.S.A. TSCA	on inventory
Europe EINECS	on inventory



Europe Classification **Harmful**
Europe Risk Phrases **R: 65** – Harmful; may cause lung damage if swallowed.
Europe Safety Phrases **S: 23, 62** – Do not breathe vapour or spray (mist). If swallowed, do not induce vomiting; seek medical advice and show this document.

16. OTHER INFORMATION

Prepared for Megaloid Laboratories by Peter Bursztyn, (705) 734-1577

Data from RTECS, HSDB (Haz. Substance Data Base), Cheminfo (CCOHS), IUCLID Datasheets (ESIS – European Chem. Substance Info. System), & others.

Preparation Date: **March 2004** Revision Date: **April 2007, April 2010, April 2013**

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