



5515 North Service Rd. #306
Burlington, Ontario L7L 6G4

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megaloid.ca



Responsible Care®
Our commitment to sustainability.



RDC
Responsible Distribution Canada
Leaders in Chemicals and Ingredients

1. PRODUCT IDENTIFICATION

Name: Mineral Spirits 1%

Synonyms: solvent naphtha (petroleum), medium aliphatic

CAS#: 64742-88-7

Product Uses: solvent, diluent, fuel

Supplier: Megaloid Laboratories Limited

Identifier: 5515 North Service Road, Ste 306
Burlington, Ontario, Canada
L7L 6G4

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EMERGENCY INFORMATION: Call CHEMTREC - (800) 424-9300 (CCN# 693764)

2. HAZARDS

GHS Class <i>(category)</i>	Flammable <i>(3)</i>	Aspiration <i>(1)</i>	Skin irritant <i>(3)</i>	STOT <i>(3)</i>	STOT <i>(3)</i>	Acute Aquatic <i>(2)</i>
Signal Word	DANGER					
Hazard Statements	highly flammable (H226)	May be fatal if swallowed and enters airways (H304)	Causes mild skin irritation (H316)	May cause dizziness or drowsiness (H336)	May cause respiratory irritation (H335)	Toxic to aquatic life (H401)



Label Pictograms

GHS Precautionary Statements for Labelling

Prevention

P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.

P240 Ground or bond container and receiving equipment.

P241 Use explosion-proof electrical, ventilating and lighting equipment.

P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing vapours.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear eye protection, protective gloves and clothing of butyl rubber
Response:	
P301, P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
P303, P361, P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304, P340	If inhaled remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTRE or doctor if you feel unwell.
P331	Do NOT induce vomiting.
P332, P313	If skin irritation occurs: Get medical advice or attention.
P370, P378	IN CASE OF FIRE: Use appropriate foam dry chemical powder
P501	Dispose of contents and container in accordance with local, regional, national and international regulations.

3. COMPOSITION

Chemical Name:	CAS No.	%	Other Identifiers
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	100	EC # 265-191-7

4. FIRST AID

Inhalation

Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.

Skin Contact

Wash with plenty of water. Remove contaminated clothing and do not reuse until thoroughly laundered.

Eye Contact

Wash eyes with plenty of water, holding eyelids open. Seek medical assistance if there is any irritation.

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.

First-aid Comments

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.

5. FIRE FIGHTING & FLAMMABILITY

Extinguishing Media

Suitable Extinguishing Media

Alcohol-resistant foam, dry chemical, water fog, water spray only to cool & dilute.

Unsuitable Extinguishing Media

Do not use water jet - spreads fire.

Combustion Products

Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Specific Hazards Arising from the Product

Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Special Protective Equipment and Precautions for Fire-fighters

Firefighters must wear SCBA. Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

6. ACCIDENTAL RELEASE MEASURES

Serious Fire Potential:

blanket spill with foam as a precaution against accidental ignition. Take extreme care to avoid sparks – do not operate (turn on OR off) electrical appliances near spill, unless explosion proof.

Personal Precautions, Protective Equipment, and Emergency Procedures

Restrict access to area until completion of cleanup. Ensure cleanup is conducted by trained personnel only. Wear adequate personal protective equipment. Ventilate area. Extinguish or remove all ignition sources. Use appropriate safety equipment. Notify government occupational health and safety and environmental authorities.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Minimize the use of water to prevent environmental contamination.

Methods and Materials for Containment and Cleaning Up

Handling Spill: Ventilate contaminated area; recover free liquid with suitable pumps; absorb residue on an inert sorbent, sweep & pick up using plastic or aluminium shovel, & store in closed containers for recycling or disposal.

Other Information

Report spills to local health, safety and environmental authorities, as required.

7. HANDLING & STORAGE

Precautions for Safe Handling

Non-sparking aluminum or bronze hand tools are recommended if the product is handled close to the Flash Point (40oC / 104oF). Electrical & mechanical equipment (including lighting, switchgear & forklift trucks) used with or around this product should be explosion-proof. This product creates & retains a static charge on agitation or transfer from one container to another. Despite the high flash point, it is prudent to electrically bond the source container, receiving container & transfer equipment before moving contents. (Does not apply to transfer of less than 10 litres.)

Avoid splash by keeping the product nozzle below the surface in the receiving container.

Empty containers may contain a flammable / explosive vapour. Always ensure that containers, empty or full, are tightly sealed unless in use.

Never cut, drill, weld or grind on or near this container.

Avoid breathing product vapour. Use with adequate ventilation. Avoid prolonged contact with skin & wash work clothes frequently. An eye bath must be available near the workplace.

NOTE: Carelessly discarded absorbent materials (eg: cotton rags) soaked in mineral spirits can undergo spontaneous combustion. Always dry used absorbent materials thoroughly before discarding.

Conditions for Safe Storage

Store & use in a cool, dry environment, away from sources of ignition & oxidising agents.

8. EXPOSURE CONTROL & PERSONAL PROTECTION

Ontario TWAEV	100ppm / 525mg/m ³	Ontario STEV	Not listed
AGGIH TLV	100ppm / 525mg/m ³	ACGIH STEL	Not listed
OSHA PEL	200ppm / 1150mg/m ³	OSHA STEL	Not listed

Ventilation	Mechanical ventilation may be required to control airborne titre; depending on handling procedures
Hands	nitrile or "Viton" gloves recommended – other types may also protect; consult supplier to confirm suitability
Eyes	Safety glasses with side shields – always protect the eyes
Clothing	wear impermeable (above) apron, boots, & long sleeves if there is any danger of splashing

Appropriate Engineering Controls

For large scale use of this product: do not allow product to accumulate in the air in work or storage areas, or in confined spaces. Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

9. PHYSICAL PROPERTIES

Appearance	Clear colourless liquid.
Odour	mild kerosene odour
Odour threshold	Not Available
Ph	none – (does not liberate hydrogen ions when dissolved)
Melting Point/Freezing Point	-60 °C / -76 °F (freezing)
Initial Boiling Point/Range	149 - 213 °C (300 - 415 °F)
Flash Point	40-46 °C (104-115 °C) (closed cup)
Evaporation Rate	0.15 (Butyl Acetate = 1)
Flammability (Solid, Gas)	Not Available
Upper/Lower Flammability or Explosive Limit	6% (upper); 0.6% (lower)
Vapour Pressure	2.3 mm Hg (0.3 kPa) at 20 °C (68 °F)

Vapour Density (air = 1)	4.8
Relative Density (water = 1)	0.78
Water Solubility	<i>virtually nil – no specific solubility available. Also soluble in hydrocarbons and other non-polar solvents; nearly insoluble in methanol</i>
Partition Coefficient, n-Octanol/Water (Log Kow)	3.7 to 6.7 – for the various molecular species present
Auto-ignition Temperature	>220 °C (430°F)
Decomposition Temperature	<i>not known – no decomposition below the Autoignition Temperature</i>
Viscosity	1 to 2.4 centistokes (40 °C / 104 °F) – mobile liquid
Physical State	Liquid
Molecular Weight	143 grams per mole
Conversion Factor	1ppm = 5.25mg/m ³ (estimated from average molecular weight)

10. REACTIVITY

Dangerously Reactive with strong oxidising agents.

Chemical Stability

Stable; will not polymerize.

Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas. Do not store with strong oxidizing agents.

Incompatible Materials

Oxidizing materials.

11. TOXICITY

Acute Toxicity	
LD₅₀ (oral)	>5000mg/kg (rat), 20,000mg/kg (rat) – no mortality in these tests
LD₅₀ (skin)	>2000 & >4000mg/kg (rabbit) – no symptoms of toxicity
LC₅₀ (inhalation)	>4300, >4500, >5300 & >6000mg/m ³ (rat) – no symptoms of toxicity

Skin Corrosion/Irritation

may irritate – of 14 reports, 7 are “irritating” & 7 and “not irritating”.

Serious Eye Damage/Irritation

not irritating – 11 of 11 reports.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

very high vapour concentration (from heated product) may cause burning sensation in nose & throat; intoxication possible – not relevant to industrial exposure.

Skin Absorption

slight; no toxic effects likely by this route.

Ingestion

may cause diarrhoea & stomach discomfort – not a route of industrial exposure

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Do not breathe vapours. If inhaled remove person to fresh air and keep comfortable for breathing.

Respiratory and/or Skin Sensitization

Not a sensitiser in humans or animals.

Carcinogenicity

Not a carcinogen. IARC: Group 3 – Not classifiable as to its carcinogenicity to humans.

ACGIH®: Not specifically designated. NTP: Not specifically listed. OSHA: Not specifically listed.

Reproductive Toxicity

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Germ Cell Mutagenicity

Not known to be a mutagen.

12. ECOLOGICAL INFORMATION

Bioaccumulation	<i>may bioaccumulate, but may not persist long enough to bioaccumulate</i>
Persistence and Degradability	Biodegradation - <i>components biodegrade in the presence of oxygen; 55-63% in 28 days; 59% & 61% in 28 days</i> Abiotic Degradation - <i>components react with atmospheric hydroxyl radicals; estimated ½-life in air of major components ranges from 0.2 to 0.7 days</i>
Mobility in soil, water	<i>water insoluble; migrates slowly in soil & water</i>
Aquatic Toxicity	
LC50 (Fish, 96hr)	<i>800mg/litre (Salmo gairdneri & Pimephelas promelas), 2-5, >10, 18, 20 & 25mg/litre (Oncorhynchus mykiss)</i>
EC50 (Crustacea, 48hr)	<i>>100mg/litre (Daphnia magna), 1.4, 1.9, >3, 21 & 40mg/litre (Daphnia magna)</i>
EC50 (Algae, 96 hr)	<i>450mg/litre (Selenestrum capricornutum), 1-3, 3.7, 6.7, 8.3 & 10mg/litre (Pseudokirchnerella subcapitata)</i>
EC50 (Bacteria)	<i>678mg/litre (Tetrahymena pyriformis – QSAR calculation)</i>

13. DISPOSAL

Water Disposal

Do not flush to sewer, recycle solvent if possible, incinerate in a facility with flue gas monitoring and scrubbing.

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	UN1268	
AND	Shipping Name	Petroleum Distillates, n.o.s. (Naphtha Solvent)	
U.S.A. 49 CFR	Class & Packing Group	3, PG III	
Marine Pollutant ERAP Required Reportable Quantity E R G No.	Not a Marine Pollutant NO NO 128		

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

15. REGULATIONS

Canada DSL	On Inventory
U.S.A. TSCA	On Inventory
Europe EINECS	On Inventory

Canadian Regulations

CEPA - National Pollutant Release Inventory (NPRI)
Part 5.

U.S.A. Regulations

OSHA Standards: Permissible Exposure Limit: Table Z-1 8-hr Time Weighted Avg: 500 ppm (2900 mg/cu m).

Threshold Limit Values: 8 hr Time Weighted Avg (TWA): 100 ppm. Excursion Limit
Recommendation: Excursions in worker exposure levels may exceed 3 times the TLV-TWA for no more than a total of 30 minutes during a work day, and under no circumstances should they exceed 5 times the TLV-TWA, provided that the TLV-TWA is not exceeded.

Clean Water Act (CWA) 307: toluene; benzene; ethylbenzene; naphthalene

Clean Water Act (CWA) 311: toluene; benzene; ethylbenzene; naphthalene

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Centre at (800)424-8802.

SARA 302/304: SARA 304 RQ: Not applicable.

SARA 311/312: Classification: FLAMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
 (Narcotic effects) - Category 3
 ASPIRATION HAZARD - Category 1
 HNOC - Static-accumulating flammable liquid
 HNOC - Corrosive to digestive tract

State Regulations

Massachusetts: The following components are listed: NONANE

New York: None of the components are listed.

New Jersey: The following components are listed: NONANE

Pennsylvania: The following components are listed: NONANE

California Prop 65 WARNING: This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Naphthalene, Ethylbenzene, Cumene, which are known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm.

Other Regulations

Australia: All components are listed or exempted.

China: All components are listed or exempted.

Europe: All components are listed or exempted.

Japan: Japan inventory (ENCS): All components are listed or exempted.

Japan inventory (ISHL): Not determined.

Republic of Korea: All components are listed or exempted.

Malaysia: All components are listed or exempted.

New Zealand: All components are listed or exempted.

Philippines: All components are listed or exempted.

Taiwan: Not determined.

Turkey: Not determined.

Thailand: Not determined.

Viet Nam: Not determined.

16. OTHER INFORMATION

NFPA RATING	Health 1	Flammability 2	Instability 0
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Prepared for Megaloid Laboratories Limited **by** Richard Koscher

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Revision Dates: May 2005, June 2008, Oct 2009, Oct 2012, Oct 2015, November 2018

Key to Abbreviations	ACGIH® = American Conference of Governmental Industrial Hygienists AIHA® = AIHA® Guideline Foundation HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health NIOSH = National Institutr for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket

	<p>Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).</p>
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