

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

> Phone: 905-337-7411 Fax: 905-337-1686

> > _megaloid.ca



1. PRODUCT IDENTIFICATION

| Name: | Solvent 150 |
|---------------|--|
| | solvent naphtha (petroleum), heavy aromatic; various trade names |
| CAS# | 64742-94-5 |
| Product Uses: | High flash point aromatic hydrocarbon solvent |
| | |
| Supplier | Megaloid Laboratories Limited |

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Responsible Care[®]

ent to sustainability.

| Megalolu Laboratories Linnieu |
|---|
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| Burlington, Ontario, Canada |
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| |

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

2. HAZARDS

| GHS Class | Flammable | Skin irritant | Eye irritant | Carcinogen | Aspiration hazard | STOT |
|----------------------|---------------------------------|--|---|---|---|--|
| (category) | (4) | (3) | (2A) | (2) | (1) | (3) |
| Signal Word | DANGER | | | | | |
| Hazard Statements | combustible liquid (H227) | Causes mild skin irritation (H316) | Causes serious eye irritation (H319) | Suspected of causing cancer (H351) | Mat be fatal if swallowed & enters airways (H304) | May cause dizziness or drowsiness (H336) |

| Label Pictograms | | | |
|------------------|---|--|--|
| GHS Precautio | nary Statements for Labelling | | |
| Prevention | | | |
| P201 | Obtain special instructions before use | | |
| P202 | Do not handle until all safety precautions have been read and understood. | | |
| P210 | Keep away from heat, hot surfaces, sparks , open flames and other ignition sources. No smoking. | | |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. | | |

| P264 | Wash skin thoroughly after handling |
|------------------|--|
| P271 | Use only outdoors or in a well-ventilated area |
| P264 | Wash hands thoroughly after handling. |
| P280 | Wear eye protection, protective gloves and clothing of butyl rubber |
| Response | |
| P301, P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
| P302, P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P305, P351, P338 | IF IN EYES): Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P304, P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P331 | Do NOT induce vomiting. |
| P332, P313 | If skin irritation occurs: Get medical advice/attention. |
| P362, P364 | Take off contaminated clothing and wash it before reuse. |
| P370, P378 | In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish. |
| P391 | Collect spillage. |
| Storage | |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| Disposal | |
| 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 | 64742-94-5 | 70-100 | EC # 200-661-7 |
| Naphthalene | 91-20-3 | <5 | EC#202-049-5 |
| 1,2,4-Trimethylbenzene | 95-63-6 | <6 | EC# |
| 1,2,3-Trimethylbenzene | 526-73-8 | <2 | EC# |

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

Foam, dry chemical, water fog or spray only to cool intact containers, product floats on water – water jet spreads flames; firefighters must wear SCBA

Combustion Products

Carbon monoxide, Carbon dioxide, smoke and irritating vapours as products of incomplete combustion.

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

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for firefighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

Environmental Precautions

Stop and contain spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use foam on spills to minimize vapors Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard.

Methods and Materials for Containment and Cleaning Up

Leak Precaution: dyke to control spillage and prevent environmental contamination

Handling Spill: Ventilate contaminated area; remove all sources of ignition; absorb residue on an inert sorbent, non-sparking tools should be used.

Other Information

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

7. HANDLING & STORAGE

Precautions for Safe Handling

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap- plication area. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Keep away from heat and sources of ignition. Keep container closed when not in use.

Conditions for Safe Storage

Store in original container.

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. To maintain product quality, do not store in heat or direct sun- light.

8. EXPOSURE CONTROL & PERSONAL PROTECTION

| Ontario TWAEV | not listed | Ontario STEV | not listed |
|---------------|--------------------|------------------|------------|
| ACGIH TLV | not listed | ACGIH STEL | not listed |
| OSHA PEL | 500ppm / 2000mg/m³ | OSHA STEL | not listed |

| Ventilation | Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator |
|-------------|---|
| 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 | No special protective clothing required |

Appropriate Engineering Controls

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: Local ventilation should be provided. Use explosion-proof ventilation equipment to stay below exposure limits.

9. PHYSICAL PROPERTIES

| Appearance | Clear colourless liquid. |
|---|--|
| Odour | Aromatic. Sweetish |
| Odour threshold | No data available |
| рН | No data available |
| Melting Point/Freezing Point | 6.6°C / 44°F, also 6.5°C / 44°F |
| Initial Boiling Point/Range | 180-217°C / 356-423°F |
| Flash Point | 63°C / 145°F (closed cup) |
| Evaporation Rate | <1 (Butyl Acetate =1) |
| Flammability (Solid, Gas) | Combustible, avoid open flames, sparks, static discharge and intense heat |
| Upper/Lower Flammability or Explosive Limit | 0.9% – 6.4% Based on Trimethylbenzene |
| Vapour Pressure | 0.3kPa (38°C / 100°F) |
| Vapour Density (air = 1) | 4 |
| Relative Density (water = 1) | 0.89-0.905 |
| Water Solubility | Insoluble in, cold water, hot water. Also soluble in most organic solvents |
| Partition Coefficient, n-Octanol/Water (Log Kow) | No data available |
| Auto-ignition Temperature | No data available |
| Conversion Factor | No data available |
| Viscosity | approximately 0.97 mPa.s (38 °C) |
| Physical State | Liquid |
| Molecular Weight | 135 grams per mole |
| Molecular Formula | Complex hydrocarbon mixture |

10. REACTIVITY

Dangerously Reactive Hazardous polymerisation does not occur.

Also Reactive with - none known

Chemical Stability *Stable under normal conditions*

Possibility of Hazardous Reactions *May release COx, NOx, smoke and irritating vapours when heated to decomposition.* **Conditions to Avoid** *Reactive or incompatible with the following materials: oxidizing agents and acids.*

Mechanical Impact Not sensitive

11. TOXICITY

 Acute Toxicity

 LD50 (oral)
 >5000mg/litre (rat)

 LD50 (skin)
 >2000mg/kg (rabbit) – no mortality, no adverse symptoms reported

 LC50 (inhalation)
 >5mg/litre (rat); exposure time 4hr; test atmosphere: dust/mist– no mortality

Skin Corrosion/Irritation No data available Serious Eye Damage/Irritation Slightly irritating

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Irritating above 100ppm, however vapour pressure is low; prolonged exposure to high concentrations may cause headache, dizziness, drowsiness **Skin Absorption**

Slight; no toxic effects likely by this route Ingestion

Headache, dizziness, drowsiness are possible; not a typical route of industrial exposure. STOT (Specific Target Organ Toxicity) - Repeated Exposure

> Respiratory and/or Skin Sensitization Not a sensitizer in humans or animals. Carcinogenicity Naphthalene is classified as a "possible human carcinogen" (IARC: Group 2B – Possibly carcinogenic to humans. ACGIH®: A3 – Confirmed animal carcinogen. NTP: Reasonably anticipated human carcinogen. OSHA: Not specifically listed.) Reproductive Toxicity No known effect in humans or in animals without also causing maternal toxicity.. Germ Cell Mutagenicity No known effect in humans or in animals without also causing maternal toxicity.

12. ECOLOGICAL INFORMATION

| Bioaccumulation | probably not a bioaccumulator; did not accumulate in various fish nor in yeast, nor in guinea pigs |
|----------------------------------|---|
| Persistence and Degradability | Biodegradation - aromatic 150 biodegrades slowly in the presence of oxygen; ~40% in 4wks in domestic sewage sludge naphthalene is poorly biodegradable Abiotic Degradation - many aromatic hydrocarbons are susceptible to both direct and indirect photolysis; the rate of degradation is unknown |
| Mobility in soil, water | water insoluble; almost immobile in soil or water |
| Aquatic Toxicity | |
| LC50 (Fish, 96hr) | 2.16mg/litre (Daphnia magna, 48hr) |
| EC50 (Crustacea, 24hr) | 1.96mg/litre (Daphnia magna, 48hr) ¹ , |

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| EC50 (Algae) | 0.4mg/litre (Chlorella vulgaris,72hr), |
|-----------------|--|
| EC50 (Bacteria) | 29mg/litre (Nitrosomonas sp.) |

13. DISPOSAL

Water 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 | Not regulated for transport | • |
|---------------|-----------------------|--|---------|
| U.S.A. 49 CFR | Shipping Name | UN 1268 Petroleum distillates ,n.o.s. (heavy aromatic naphtha) | 3 |
| | Class & Packing Group | 3, PG III | US Only |

| Marine Pollutant ERAP Required | Yes No | |
|-----------------------------------|--|--|
| Reportable Quantity | 100 lbs. (45.4 kgs.) – (Naphthalene only - 0- 5% in A150) | |
| E R G No. | 128 | |

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. (1,2,4-Trimethylbenzene)

U.S.A. Regulations

SARA 302/304: This product contains no known chemicals regulated under SARA 302/304. **SARA 311/312:** Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312:

Physical Hazards – Fire Hazard

Health Hazards - Immediate (acute) health hazard, Delayed (chronic) health hazard **SARA 313:** This product contains the following known chemicals regulated under SARA 313.

<u>Chemical name</u> Naphthalene 1,2,4-Trimethylbenzene
 CAS #
 Typical Value

 CAS# 91-20-3
 <10%</td>

 CAS# 95-63-6
 <2%</td>

US State Regulations

Chemicals associated with the product which are subject to the state right-to-know regulations are listed along with the applicable state(s):

Illinois - Listed (Naphthalene, 1, 2, 4-trimethylbenzene) Minnesota - Listed (solvent naphtha (petroleum), heavy aromatic, Naphthalene, 1,2,4trimethylbenzene) New Jersey – Listed (solvent naphtha (petroleum), heavy aromatic, Naphthalene, 1,2,4trimethylbenzene) Pennsylvania – Listed (solvent naphtha (petroleum), heavy aromatic, Naphthalene, 1,2,4trimethylbenzene) Rhode Island - Listed (Naphthalene, 1, 2, 4-trimethylbenzene)

California Proposition 65 - This material is not known to contain a chemical substance known to the State of California to cause cancer, reproductive, or developmental toxicity under California Proposition 65.

Naphthalene (CAS # 91-20-3)

U.S. - California - Proposition 65 - Carcinogens ListYesU.S. - California - Proposition 65 - Developmental ToxicityNoU.S. - California - Proposition 65 - Reproductive Toxicity – FemaleNoU.S. - California - Proposition 65 - Reproductive Toxicity – MaleNoNo significance risk level (NSRL)5.8 µg/day

International Regulations

International Inventories listed on the chemical inventories of the following countries or qualifies for an exemption:

Australia (AICS) China (IECSC) Japan (ENCS) Korea (KECI) Philippines (PICCS) Taiwan (TCSCA)

16. OTHER INFORMATION

References

| NFPA RATING | Health | 1 | Flammability | 2 | Instability 0 | |
|--------------------------------------|---|---|----------------------|---|-----------------|--|
| Prepared for | | | oratories Limited by | | Richard Koscher | |
| Preparation Date: Revision Dates: | October 2003 July 2006, Nov 2008, Nov 2011, November 2014, July 2017, January 2019, May 2019 | | | | | |
| 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 NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances | | | | | |

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| | (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket 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). |
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