1. **PRODUCT IDENTIFICATION**

**Name**
Aromatic 100

**Synonyms**
light aromatic solvent naphtha (petroleum); high flash point aromatic naphtha, “Solvesso”

**CAS#**
64742-95-6

**Europe EC#**
265-199-0

**Product Uses**
high flash point hydrocarbon solvent, diluent, in paints, coatings, inks, degreasers etc

**EMERGENCY INFORMATION**

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

2. **HAZARDS**

**GHS Class**
flammable  
carcinogen  
aspiration haz.

**Category**
(3)  
(2)  
(2)

**Signal Words**
WARNING  
WARNING  
WARNING

**Hazard Statements**
flammable liquid & vapour  
suspected of causing cancer  
may be harmful if swallowed and enters airways

**Canada – WHMIS**
B 3, D 2B

**Key:**
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

3. **COMPOSITION**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>%</th>
<th>TWAEV / TLV</th>
<th>LD50 (mg/kg)</th>
<th>LD50 (mg/kg)</th>
<th>LC50 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Aromatic Solvent Naphtha</td>
<td>64742-95-6</td>
<td>100%</td>
<td>not listed</td>
<td>&gt;2900</td>
<td>2900</td>
</tr>
<tr>
<td>1,2,4-trimethylbenzene</td>
<td>95-63-6</td>
<td>10-45%</td>
<td>25 / 125</td>
<td>5000</td>
<td>3665</td>
</tr>
<tr>
<td>cumene</td>
<td>98-82-8</td>
<td>0-6%</td>
<td>50 / 250</td>
<td>1400</td>
<td>7950</td>
</tr>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>0-3%</td>
<td>100 / 435</td>
<td>2100</td>
<td>1700</td>
</tr>
</tbody>
</table>

**NOTE:** This is a distillation product composed of many molecular species. Only the major components are named above.

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**: 41°C / 106°F (closed cup)
- **Autoignition Temperature**: 463°C / 865°F
- **Flammable Limits**: 0.6% – 7%
- **Combustion Products**: carbon monoxide, nitrogen oxides, smoke, part oxidised hydrocarbon fragments
- **Firefighting Precautions**: foam, dry chemical, water fog, water spray only to cool & dilute, 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 explosion-proof pumps; absorb residue on an inert sorbent, sweep & pick up using plastic or aluminium shovel, & store in closed containers for recycling or disposal

7. **HANDLING & STORAGE**

Store in a cool, dry environment, away from sources of ignition, heat and oxidising agents. The use of non-sparking bronze or aluminium hand tools, and explosion-proof electrical & mechanical equipment (including lighting, switchgear and forklift trucks) is recommended around this product.

Despite the high flash point, it is prudent to ground or electrically bond both the source container and the receiving container, and transfer pump before transferring contents. Avoid splashing by ensuring that the product nozzle is below the surface in the receiving container. Empty containers may contain a flammable / 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. Use with adequate ventilation. If dealing with a spill, and ventilation is impossible or impractical, wear a suitable respirator with organic vapour cartridge.

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

- **Trimethylbenzene**
  - Ontario TWAEV: 25ppm / 123mg/m³
  - ACGIH TLV: 25ppm / 123mg/m³
  - OSHA PEL: 25ppm / 120mg/m³

- **Cumene**
  - Ontario TWAEV: 50ppm / 245mg/m³
  - ACGIH TLV: 50ppm / 246mg/m³
  - OSHA PEL: 50ppm / 245mg/m³

- **Xylene (Dimethylbenzene)**
  - Ontario TWAEV: 100ppm / 435mg/m³
  - ACGIH TLV: 100ppm / 434mg/m³
  - OSHA PEL: 100ppm / 435mg/m³

- **Ventilation**: mechanical ventilation may be required to control airborne titre to regulated limits

- **Hands**: “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 if normal industrial hygiene is practised

*Please ensure that this MSDS is given to, and explained to people using this product.*
9. PHYSICAL PROPERTIES

Odour & Appearance: clear, colourless liquid with mild aromatic hydrocarbon (diesel fuel) odour
Odour Threshold: 0.07ppm
Vapour Pressure: 6mmHg / 0.8kPa (20°C / 68°F)
Evaporation Rate (Butyl Acetate = 1): 0.2
Vapour Density (air = 1): 4
Boiling Range: 149-182°C / 300-360°F
Freezing Point: -60°C / -76°F
Specific Gravity: 0.87 (20/20°C)
Water Solubility: 200milligrams per litre – slight
Also soluble in: most organic solvents
Log P (Octanol/H2O partition): 2.1-6.0 (calculated)
Viscosity: 0.9centipoise (25°C / 77°F)
pH: none – (does not liberate hydrogen ions when dissolved)
Molecular Weight: mixture of hydrocarbons – approximately 120grams/mole

10. REACTIVITY

Dangerously Reactive With: strong oxidising agents; chlorine, fluorine, strong acids (eg: nitric acid)
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 irritate, drying
- Skin Absorption: slight; no toxic effects likely by this route
- Eye Contact: liquid mildly irritating; vapour irritating above 75ppm; will not damage
- Inhalation: irritating above 75ppm; high concentrations may cause headache, dizziness drowsiness
- Ingestion: headache, dizziness, drowsiness are possible; not a typical route of industrial exposure

Effects, Chronic Exposure:
- General: prolonged exposure may cause dermatitis & skin cracking; “organic solvent syndrome” with fatigue, memory loss, tingling & numbness in limbs were seen after long-term exposure
- Sensitising: not a sensitiser in humans or animals
- Carcinogen/Tumorigen: cumene is a possible human carcinogen (IARC 2B)
- Reproductive Effect: probably no effect in humans or animals without also causing maternal toxicity, however, xylene was a suspected reproductive toxin on “thin” evidence
- Mutagen: no known effect on humans or in animals without also causing maternal toxicity
- Synergistic With: not known
- LD50 (oral): 2900-3200mg/kg (rat), 8400mg/kg (rat)
- LD50 (skin): >3160mg/kg (rabbit)
- LC50 (inhalation): approx. 2900ppm (rat)

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

Bioaccumulation expected to be readily metabolised and not bioaccumulate
Biodegradation expected to degrade readily and rapidly in the presence of oxygen; 72% over 20 days
Natural microbe populations need several weeks of acclimatisation before they can metabolise some hydrocarbons effectively.
Abiotic Degradation many aromatic hydrocarbons are susceptible to both direct and indirect photolysis; the rate of degradation is unknown but ½-life in air likely to be in the range of 20-40hr
Mobility in soil, water expected to move slowly in soil and water

Aquatic Toxicity
LC₅₀ (Fish, 96hr) 41 & 45mg/litre (Pimephelas promelas), 2.34, 9.22mg/litre (Onchorhynchus mykiss), 119mg/litre (Alburnus alburnus), 82mg/litre (Cyprinodon variegatus),
EC₅₀ (Crustacea, 24hr) 6.1, 170 & 226mg/litre (Daphnia magna)
EC₅₀ (Algae) 19 & 56mg/litre (Selenastrum capricornutum), 3.3mg/litre (Skeletonema costatum)
EC₅₀ (Bacteria) no data – since it is readily biodegradable, aromatic 100 cannot be very toxic to bacteria . .

The variability in the data is probably due to the difficulty of suspending a hydrophobic product in water. Also, this product is lighter than water, readily separates out to float on the surface – and then volatilise. Because of this, Aromatic 100 cannot be considered very toxic to aquatic life.

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 Class & Packing Group 3 (III)
Marine Pollutant not a marine pollutant
ERAP Required NO

15. REGULATIONS

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

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: May 2004 Revision Date: May 2007, May 2010, May 2013

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