



Safety Data Sheet

1. PRODUCT IDENTIFICATION

Name Aromatic 150
Synonyms heavy aromatic solvent naphtha; various brand names: "Cyclosol", "Solvesso", Shellsol
CAS# 64742-94-5
Europe EC# 265-198-5
Product Uses high flash point aromatic solvent

EMERGENCY INFORMATION

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

2. HAZARDS

GHS Class (Category)	<i>flammable (4)</i>	<i>aspiration (2)</i>	<i>chronic aquatic toxic (2)</i>
Signal Words	WARNING <i>no symbol</i>	WARNING	<i>no Signal Word</i>
Hazard Statements	<i>combustible liquid (H227)</i>	<i>may be harmful if swallowed & enters airways (H305)</i>	<i>toxic to aquatic life with long-lasting effects (H411)</i>



Canada – WHMIS Key:

B 3, D 2B

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

	CAS#	%	TWAEV / TLV mg/m ³	LD ₅₀ (mg/kg) ORAL	LD ₅₀ (mg/kg) SKIN	LC ₅₀ ppm INHALATION
Heavy Aromatic Solvent Naphtha	64742-94-5	100%	400 / 1600	7050	>2000	5100
Naphthalene	91-20-3	0-5%	10 / 50 (skin)	1870	>2500	106 - 142
Cumene	95-63-6	0-2%	50 / 245	1400	10,630	2000
Trimethylbenzene (Pseudocumene)	98-82-8	0-2%	25 / 125	5000	not known	3670

4. FIRST AID

SKIN: Wash with soap & plenty of water. Remove contaminated clothing & 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 62°C / 144°F (closed cup)
Autoignition Temperature	above 443°C / 830°F – <i>other (higher) values are also given</i>
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; <i>high flash point limits hazard</i>

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 away from sources of ignition, heat oxidising agents. Although the flash point is high, consider using non-sparking bronze or aluminium hand tools, explosion-proof electrical & mechanical equipment.

It is prudent to ground or electrically bond the source container, receiving container, & transfer pump before transferring contents. Avoid splashing; ensure the product nozzle is below the surface in the receiving container. Empty containers may contain a flammable or explosive vapour. Always ensure that containers, whether empty or full, are tightly sealed unless in use.

Avoid breathing product vapour. Use with adequate ventilation. If dealing with a sizeable 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 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

CAS# 64742-94-5 – *Solvent Naphtha, Heavy Aromatic:*

Ontario TWAEV	not listed	Ontario STEV	not listed
ACGIH TLV	not listed	ACGIH STEL	not listed
OSHA PEL	400ppm (<i>petroleum distillates, naphtha</i>)	OSHA STEL	not listed
<i>Naphthalene:</i>			
Ontario TWAEV	10ppm / 52mg/m ³	Ontario STEV	15ppm / 78mg/m ³
ACGIH TLV	10ppm / 52mg/m ³	ACGIH STEL	15ppm / 79mg/m ³
OSHA PEL	10ppm / 50mg/m ³	OSHA STEL	15ppm / 75mg/m ³ (<i>California</i>)
<i>Cumene:</i>			
Ontario TWAEV	50ppm / 245mg/m ³	Ontario STEV	not listed
ACGIH TLV	50ppm / 246mg/m ³	ACGIH STEL	not listed
OSHA PEL	50ppm / 245mg/m ³	OSHA STEL	not listed
<i>Trimethylbenzene:</i>			
Ontario TWAEV	25ppm / 123mg/m ³	Ontario STEV	not listed
ACGIH TLV	25ppm / 125mg/m ³	ACGIH STEL	not listed ppm / mg/m ³
OSHA PEL	25ppm / 123mg/m ³	OSHA STEL	not listed ppm / mg/m ³

Ventilation	mechanical ventilation probably not required <i>due to low vapour pressure</i>
Hands	“Viton” gloves recommended – <i>other types may also protect; consult supplier to confirm suitability</i>
Eyes	safety glasses with side shields – <i>always protect the eyes</i>
Clothing	no special protective clothing required if normal industrial hygiene is practised

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9. PHYSICAL PROPERTIES

Odour & Appearance	clear, colourless liquid with slight aromatic hydrocarbon odour
Odour Threshold	not known
Vapour Pressure	3mmHg / 0.4kPa (20°C / 68°F)
Evaporation Rate (<i>Butyl Acetate = 1</i>)	0.06
Vapour Density (air = 1)	4.6
Boiling Range	160-215°C / 320-420°F
Freezing Point	-43°C / -45°F
Specific Gravity	0.895 (20/20°C)
Water Solubility	100milligrams per litre
Also soluble in	most organic solvents
Log P _{O/W} (Octanol/H ₂ O partition)	3.66
Viscosity	0.9centipoise (25°C / 77°F)
pH	none – (<i>does not liberate hydrogen ions when dissolved</i>)
Conversion Factor	1ppm = 4g/m ³ – <i>approximate value – Solvent 150 is a mixture of hydrocarbons</i>
Molecular Weight	not known – <i>Aromatic 150 is a mixture of hydrocarbons</i>

10. REACTIVITY

Dangerously Reactive With	strong oxidising agents; chlorine, fluorine, strong nitric or sulphuric acids
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 100ppm; will not damage
Inhalation	irritating above 100ppm, however vapour pressure is low; prolonged exposure to 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 remove natural skin oils and cause dermatitis
Sensitising	not a sensitiser in humans or animals
Carcinogen/Tumorigen	<i>naphthalene, cumene, & trimethylbenzene</i> are classified as “possible human carcinogens” (IARC 2B)
Reproductive Effect	no known effect in humans or in animals without also causing maternal toxicity ¹
Mutagen	no known effect on humans or in animals without also causing maternal toxicity ¹
Synergistic With	not known
LD ₅₀ (oral)	7050, 8400mg/kg (rat), above 5000mg/kg (rat),
LD ₅₀ (skin)	>2000 & >3160mg/kg (rabbit) – <i>no mortality recorded in these tests</i> ¹
LC ₅₀ (inhalation)	5100 & 11,400mg/m ³ (rat), above 590mg/m ³ (rat)
Chronic Toxicity	
NOAEL (oral)	300mg/kg/day (rats – various toxic symptoms – 90 days) ¹
LOAEL (skin)	119mg/kg (<i>applied twice weekly – 50 weeks</i>) (mouse, lung symptoms) ¹
NOAEC (inhalation)	2430mg/m ³ (rats – reproduction) ¹

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12. ECOLOGICAL INFORMATION

Bioaccumulation	probably not a bioaccumulator; did not accumulate in various fish nor in yeast, nor in guinea pigs ¹
Biodegradation	aromatic 150 biodegrades in the presence of oxygen; ~40% in 4wks in domestic sewage sludge <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <i>Natural microbe populations may 2-3 weeks of acclimatisation before they can metabolise aromatic hydrocarbons efficiently. Aromatic 100 is not considered to be "readily biodegradable", although biodegradation rates can be very high in soil & water "acclimatized" to aromatic hydrocarbons.</i> </div>
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; cannot move readily in soil or water
Aquatic Toxicity	
LC ₅₀ (Fish, 96hr)	19, 41, 45 & >50mg/litre (Pimephelas promelas), 2.34 & 3.0 ¹ mg/litre (Oncorhynchus mykiss)
EC ₅₀ (Crustacea, 48hr)	0.95 & 1.1 ¹ mg/litre (Daphnia magna), 140mg/litre (Diatomus forbesi)
EC ₅₀ (Algae)	2.5mg/litre (Skeletonema costatum), 4.2mg/litre (Selenastrum capricornutum), 4.1mg/litre (Anabena doliolum), 3.8 & 7.9mg/litre (Pseudokirchneriella subcapitata)
EC ₅₀ (Bacteria)	no data – <i>but biodegradability suggests bacterial toxicity cannot be high</i>
<i>Higher values are also given. Low water solubility makes these less believable. Often, the product formed a floating layer in the test chamber.</i>	

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. <i>Never cut, drill, weld or grind on or near this container, even if empty</i>

14. TRANSPORT CLASSIFICATION

U.S.A. 49 CFR	PIN	NA - 1993	
	Shipping Name	COMBUSTIBLE LIQUIDS N.O.S. (aromatic naphtha OR petroleum distillates)	
	Class	3, combustible – no packing group	
Marine Pollutant		P	
ERAP Required		NO	
Canada TDG	<i>not regulated for transport in Canada</i>		U.S.A. Only →



15. REGULATIONS

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

This product is probably on the chemical inventory of most countries.

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**

(1) OECD SIDA Initial Assessment Profile, C₁₀-C₁₃ Aromatic Hydrocarbon Solvents:

<http://webnet.oecd.org/Hpv/ui/handler.axd?id=8b63462c-f467-4590-96d5-c068e7dcd99>

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