

Material Safety Data for: Rubber Solvent Blend

1. PRODUCT IDENTIFICATION

Name Rubber Solvent Blend
CAS# < tabulated below >
Product Uses rubber solvent

2. INGREDIENTS

	CAS NUMBER	%	TWAEV / TLV ppm / mg/m ³	LD ₅₀ ORAL	(mg/kg) SKIN	LC ₅₀ ppm INHALATION
n-Hexane	110-54-3	19-26%	50 / 180	25,000	not known	42,600
Hexane isomers – eg: dimethylbutane	107-83-5	unknown	500 / 1800	10,000	not known	not known
Cyclohexane	110-82-7	0-3%	100 / 340	820*	180,000	20,800
n-Heptane	142-82-5	unknown	400 / 1600	15,000	not known	25,200
Heptane isomers – eg: isoheptane	591-76-4	unknown	400 / 1600	not known	not known	19,500
Methyl Cyclohexane	108-87-2	unknown	400 / 1600	1200	87,000	15,200
Toluene	108-88-3	2.5-4.5%	50 / 187	640*	12,200	400*
Octane	111-65-9	unknown	300 / 1400	not known	not known	24,200
Nonane	111-84-2	unknown	200 / 1050	not known	not known	3200

NOTE: This product consists of 3 naphthas: 64742-89-8, 64741-84-0, 64742-48-9, blended to yield the properties given in Part 5. The composition includes the above substances.

*These LD₅₀ LC₅₀ values are very low and probably do not accurately represent the true toxicity of the substance.

3. (a) HAZARDS SUMMARY

Hazards, Quick Guide: combustible liquid, heavy vapour travels, distant ignition and flashback are possible

Canada – WHMIS

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

U.S.A. – HMIS

Key:

Health – 1, Fire – 3, Reactivity – 0

0=minimal, 1=slight, 2=moderate, 3=serious, 4=severe

3. (b) HAZARDS – TOXICITY

Effects, Acute Exposure

Skin Contact	drying, may irritate causing local redness
Skin Absorption	slight; no toxic effects likely by this route
Eye Contact	may be irritating causing local redness; will not damage eyes
Inhalation	vapour may irritate; headache, dizziness, drowsiness, intoxication
Ingestion	poorly absorbed; may cause a (temporary) laxative effect

Effects, Chronic Exposure

General	prolonged exposure may cause dermatitis; may damage liver & kidneys on ingestion
Sensitising	not a sensitiser in humans or animals
Carcinogen/Tumorigen	not considered a tumorigen or a carcinogen in humans or animals (benzene content greatly reduced)
Reproductive Effect	no known effect in humans; toluene known as a rodent reproductive toxin
Mutagen	no known effect on humans or animals
Synergistic With	not known
Estimated LD ₅₀ (oral)	over 5000mg/kg – LD ₅₀ impossible to calculate; this is a likely figure
Estimated LD ₅₀ (skin)	over 10,000mg/kg – LD ₅₀ impossible to calculate; this is a likely figure
Estimated LC ₅₀ (inhalation)	over 10,000ppm – LC ₅₀ impossible to calculate; this is a likely figure

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

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4. FIRST AID

- SKIN: Wash with soap and plenty of water. Remove contaminated clothing and do not reuse until thoroughly cleaned or 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.

5. PHYSICAL PROPERTIES

Odour & Appearance	clear, colourless, mobile liquid with mild gasoline-like odour
Odour Threshold	not known; likely below 50ppm
Vapour Pressure	below 110mmHg / 14.7kPa (20°C / 68°F)
Evaporation Rate (<i>Butyl Acetate = 1</i>)	~6
Vapour Density (air = 1)	~3 – <i>blend, impossible to calculate</i>
Boiling Range	71-135°C / 160-275°F
Freezing Point	below -18°C / 0°F
Specific Gravity	0.71 (20/20°C)
Water Solubility	1000 milligrams per litre (20°C / 68°F)
Also soluble in	most organic solvents
Viscosity	not known – highly mobile liquid
pH	none – (<i>does not liberate hydrogen ions when dissolved</i>)
Conversion Factor	blend – not applicable
Molecular Weight	blend – not applicable

6. FLAMMABILITY & FIRE FIGHTING

Flash Point	above -20°C / -4°F (closed cup) – <i>for hexane & isomers</i>
Autoignition Temperature	above 200°C / 390°F – <i>expected value for certain aliphatic hydrocarbons in the blend</i>
Flammable Limits	1% – 7% – <i>typical values for aliphatic hydrocarbons constituting the bulk of this blend</i>
Combustion Products	carbon monoxide, nitrogen oxides, smoke, part oxidised hydrocarbon fragments
Fire Fighting Precautions	foam, dry chemical, water fog, water spray only to cool & dilute, product floats on water – water jet spreads flames; fire fighters must wear SCBA
Static Charge Accumulation	<i>readily accumulates a static charge on agitation or pumping which can cause ignition</i>

7. STABILITY / REACTIVITY

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

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8. PROTECTIVE EQUIPMENT / EXPOSURE CONTROL

TWAEV / TLV	<i>individual values for components of this blend tabulated in Part 2</i>
STEL	<i>typically, double those for the TWAEV / TLV listed in Part 2</i>
Ventilation	mechanical ventilation may be required to maintain airborne titre below TWAEV; depending on handling procedures
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

9. HANDLING & STORAGE

Store in a cool, dry environment, away from sources of ignition, heat and oxidising agents. ***Always use non-sparking bronze or aluminium hand tools. All electrical and mechanical equipment (including lighting, switchgear and forklift trucks) used with or around this product must be explosion-proof.***

Always 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.

This product contains highly volatile components and should only be used in a enclosed apparatus. (*Apart from health and flammability, the loss of the volatile components will impair the product’s properties!*) If an enclosed apparatus is not available, ventilation must be adequate to maintain vapour titres below the TWAEV / TLV (Part 2). Use with adequate ventilation. If dealing with a spill, and ventilation is impossible or impractical, wear a respirator with an 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.

10. SPILL PROCEDURES

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.

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 & pick up using plastic or aluminium shovel, & store in closed containers for recycling or disposal

11. 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>

12. ENVIRONMENTAL INFORMATION

Bioaccumulation	the components in this product are not bioaccumulators
Biodegradation	the components in this product biodegrade readily in the presence of oxygen
Abiotic Degradation	this product reacts with atmospheric hydroxyl radicals; the estimated half-life in air is impossible to estimate for a multi-component blend
Mobility in soil, water	this product is water insoluble and cannot move in soil and water

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13. TRANSPORT REGULATIONS

Canada TDG	PIN	UN-1268
	Shipping Name	PETROLEUM DISTILLATES N.O.S. (naphtha)
	Class	3
	Packing Group	II
U.S.A. 49 CFR	PIN	UN-
	Shipping Name	PETROLEUM DISTILLATES N.O.S. (naphtha)
	Class	3
	Packing Group	II
Marine Pollutant		not a marine pollutant

14. EMERGENCY INFORMATION

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

15. REGULATIONS

SARA Section 313 – Toxic Chemicals: This product contains n-Hexane, Toluene, and Cyclohexane which are subject to the reporting requirements of SARA 313 & 40 CFR 372.

SARA Section 311/312 Hazard Categories: Meets the criteria “Acute”, “Chronic”, and “Fire” as defined by 40 CFR, Part 370 as established by Sections 311 and 312

SARA Section 302 – Extremely Hazardous Substances: This product contains less than 1% of any substance listed as extremely hazardous in 40 CFR Part 355 as established by Section 302

Clean Water Act – Pursuant to Section 311(b)(4) of the CWA, discharges of petroleum or petroleum products of any kind to surface waters must be reported immediately to the National Response Centre (800) 424-8802

CERCLA Hazardous Substances – This product contains hazardous substances as identified in 40 CFR Part 302, Section 102(a) of CERCLA: “n-Hexane”, “Toluene”, and “Cyclohexane”.

California Proposition 65 – WARNING: This product contains the following chemicals which are known to the State of California to cause cancer, birth defects, or other reproductive harm and are subject to the requirements of California Proposition 65 – Toluene (developmental toxicant), Benzene (cancer) – *(That the quantity of benzene in this solvent is very low and unlikely to harm.)*

16. PREPARATION INFORMATION

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

File Name: Rubber Solvent Bl

Data from RTECS, Haz. Substance Data Base, Cheminfo, manufacturer data, and other source, as available

Preparation Date: **November 2003** Revision Date: **August 2006**

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