

Material Safety Data for: Trioctyl Trimellitate (TOTM)

1. PRODUCT INFORMATION

Canada TDG

Product Identification Number **UN – not regulated for transport**
 Shipping Name **not regulated for transport**
 Classification **not regulated for transport**

USA 49 CFR

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 Shipping Name **not regulated for transport**
 Classification **not regulated for transport**

Label **none required**

WHMIS Class (Canada)

not controlled under WHMIS

HMIS (U.S.A.)

Health – 0, Fire – 1, Reactivity – 0

Material Use

plasticiser

2. HAZARDOUS INGREDIENTS

	CAS NUMBER	%	TWAEV ppm	LD ₅₀ ORAL	(mg/kg) SKIN	LC ₅₀ ppm INHALATION
1,2,4-Benzenetricarboxylic acid, 2-ethylhexyl ester	3319-31-1	100%	not listed	5000	over 2000	not known

3. PHYSICAL CHARACTERISTICS

Odour & Appearance	clear, pale yellow liquid with mild characteristic odour
Odour Threshold	not known
Vapour Pressure	approx. 0.16mmHg / 0.0021kPa – <i>NOTE: at 200°C</i>
Evaporation Rate (<i>Butyl Acetate = 1</i>)	not known – <i>not volatile</i>
Vapour Density (air = 1)	not known – <i>not volatile</i>
Boiling Range	283°C / 541°F – <i>NOTE: at 3mmHg, a near vacuum!</i>
Freezing Point	-45°C / -50°F
Specific Gravity	0.987 (20/20°C)
Water Solubility	100mg per litre (25°C)
- in other solvents	not known – <i>likely soluble in acetone, ethyl acetate and similar solvents</i>
Viscosity	300centipoise (20°C)
pH	none – (<i>does not liberate hydrogen ions when dissolved</i>)

4. FLAMMABILITY & REACTIVITY

Flash Point	260°C / 500°F (closed cup)
Autoignition Temperature	291°C / 555°F
Flammable Limits	0.3% – 2.5%
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 Discharge	not a static accumulator – <i>high viscosity makes static charge development unlikely</i>
Mechanical Impact	not sensitive
Chemical Stability	stable; will not polymerize
Reactive With	strong oxidising agents
Decomposition Products	none apart from Hazardous Combustion Products

PLEASE ENSURE THAT THIS MSDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.

5. TOXICOLOGY

EFFECTS OF ACUTE EXPOSURE

Skin Contact	little to no effect
Skin Absorption	slight; no toxic effects likely by this route
Eye Contact	slightly irritating, will not damage eyes
Inhalation	viscous substance resists misting; very low vapour pressure resists vaporization
Ingestion	unlikely route of absorption for a viscous liquid; little to no effect in animal testing

EFFECTS OF CHRONIC EXPOSURE

General	little to no effect; dermatitis possible in sensitive individuals
Sensitising	not a sensitiser
Carcinogenic	not considered a tumorigen or a carcinogen in humans or animals
<i>NOTE: May contain traces of diethylhexyl phthalate – a carcinogen. We feel that these traces pose no risk to workers.</i>	
Reproductive Effect	no known effect in humans or animals
Synergistic With	not known
LD ₅₀	5000mg/kg (oral, rat), 60,000mg/kg (oral, mouse); over 2000mg/kg (skin, rabbit)
LC ₅₀	not known

6. PROTECTIVE EQUIPMENT

Hands	neoprene or “Viton” gloves recommended but not required – <i>consult supplier to confirm suitability</i>
Eyes	safety glasses with side shields – <i>always protect the eyes</i>
Ventilation	not required
Clothing	no special protective clothing required

7. ENVIRONMENT

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
Waste Disposal	do not flush to sewer ; mix with flammable solvent and incinerate in approved facility
Enviro Info	this product cannot accumulate in living tissue this product is slowly biodegradable in the presence of oxygen – 4% biodegradation in 4 weeks; in water, hydrolysis occurs with a half-life of 120 days at pH=7 and 12 days at pH=8.

8. STORAGE & HANDLING

Store and use in a cool dry environment, away from sources of ignition, heat and oxidising agents. Do not 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 should be available near the workplace.

9. 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.

(TOTM, cont'd)

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9. FIRST AID (cont'd)

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The risk and danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

10. REGULATIONS (U.S.A.)

TSCA REQUIREMENTS: Pursuant to section 8(d) of TSCA, EPA promulgated a model Health and Safety Data Reporting Rule. The section 8(d) model rule requires manufacturers, importers, and processors of listed chemical substances and mixtures to submit to EPA copies and lists of unpublished health and safety studies. Tris(2-ethylhexyl) trimellitate is included on this list.

EMERGENCY INFORMATION:

Call CANUTEC (collect) (613) 996-6666

Prepared for Megaloid Laboratories, by **Peter Bursztyn**,

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<File: TOTM>