

Comet Chemical Company Ltd.

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Materials Safety Data - DIBASIC ESTERS

Shipping Name

Transport of Dangerous Goods Class

WHMIS Class

Material Use

UN - not regulated for transport

not regulated for transport

not regulated for transport

D 2B

solvent, paint stripper, substitute for solvent acetone

1. HAZARDOUS INGREDIENTS

	CAS NUMBER	%	TWAEV (ppm)	LD ₅₀ ORAL	(mg/kg) SKIN	LC ₅₀ ppm INHALATION
Dimethyl Glutarate	1119-40-0	55 - 65%	not listed	not known	not known	not known
Dimethyl Succinate	106-65-0	15 - 25%	not listed	not known	not known	not known
Dimethyl Adipate	627-93-0	10 - 25%	not listed	not known	not known	not known

Toxicities of the individual components are not available. LD₅₀ for the mixture is given below (4).

2. PHYSICAL CHARACTERISTICS

Odour & Appearance clear, colourless, liquid with sweet musty odour

Odour Threshold 0.1 ppm

Vapour Pressure 0.2 mmHg (20°C)

Vapour Density (air = 1) not known, but heavier than air

Boiling Point 196°C - 225°C

Freezing Point -20°C

Specific Gravity 1.092

Water Solubility 5.3% (20°C)

3. FLAMMABILITY & REACTIVITY

Flash Point 100°C

Autoignition Temperature 370°C

Flammable Limits 0.9% - 8.0%

Hazardous Combustion Products carbon monoxide, nitrogen oxides, smoke

Firefighting Precautions foam, dry chemical, water fog, water spray only to cool, product floats on water - water jet spreads flames; firefighters must wear SCBA

Sensitivity to Static Discharge not sensitive

Sensitivity to Mechanical Impact not sensitive

Chemical Stability stable; will not polymerize

Reactive With strong oxidising agents, strong acids, strong alkalis

Dangerous Decomposition Products none apart from "Hazardous Combustion Products"

4. TOXICOLOGY

EFFECTS OF ACUTE EXPOSURE

Skin Contact skin irritation, discomfort, rash

Skin Absorption yes; blurred vision (temporary) may result from absorption

Eye Contact irritation, redness, discomfort, blurred vision; permanent damage unlikely

Inhalation irritation, coughing, discomfort; blurred vision (temporary) may occur

Ingestion irritating

(Dibasic Esters, cont'd)

EFFECTS OF CHRONIC EXPOSURE

General	prolonged exposure may cause blurred vision
Sensitising	no
Carcinogenic	tumorigen in rodents; no known effect in humans
Reproductive Effect	effects observed in rodents; none known in humans
Synergistic With	pre-existing eye disease
Estimated LD ₅₀	8200 mg/kg (oral, rat); over 2250 mg/kg (skin, rabbit)
Estimated LC ₅₀	110 g/m ³ (inhalation, rat)

5. PROTECTIVE EQUIPMENT

Hands	butyl rubber gloves
Eyes	safety glasses with side shields or chemical goggles
Respirator	not required if ventilation is adequate (see TWAEV, (1) above), or use organic vapour cartridge
Clothing	butyl rubber apron , boots, long sleeves, if splashing is anticipated

6. ENVIRONMENT

Leak Precaution	dyke to control spillage and prevent environmental contamination; if fire potential exists , blanket with foam as a precaution
Handling Spill inert	ventilate contaminated area; recover free liquid with explosion-proof pumps; absorb residue on an sorbent (dry sand, earth) and store in closed containers for disposal
Waste Disposal	do not flush to sewer ; may be incinerated in approved facility; biodegradeable in dilute solutions and may be disposed of in a suitable bioreactor

7. STORAGE & HANDLING

Store and use in a cool dry environment, away from sources of ignition, heat and oxidising agents. Use with adequate ventilation. Ground the container before handling to prevent static discharge which may cause ignition. 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.

8. 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 any 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 (see NOTE below). Keep victim quiet. If vomiting occurs, keep victim's head below the hips to prevent inhalation of vomited material. Seek medical help promptly.

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 product. The stomach should be emptied under medical supervision, after the installation of an airway to protect the lungs.

NOTE TO PHYSICIAN: Activated charcoal may be helpful in cases of ingestion. Administer 350 ml (large coffee mug) containing 40 g charcoal to an average sized adult. .

Emergency telephone numbers	- weekdays from 8:00 - 5:00	(705) 436-5580
	at all other times	(800) 567-7455 (Philip Environmental)

Prepared for Comet Chemical Co. Ltd., by *Nicholas Morgan*, November 2002; Revised August 2005

The information herein is given in good faith no warranty, expressed or implied is made.

PLEASE ENSURE THAT THIS MSDS IS GIVEN TO AND EXPLAINED TO THE PERSON USING THIS PRODUCT.