

BASF Australia Ltd

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 Norwest Business Park,
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 Baulkham Hills NSW 2153
 Telephone: 1 800 635 550
 Emergency: 1 800 033 111

Material Safety Data Sheet

Product Name: **SAPROL®
 FUNGICIDE**

HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA

TRADE NAME: SAPROL FUNGICIDE

OTHER NAMES: Triforine
 N,N'-[1,4-Piperazinediyl-bis(2,2,2-trichloroethylene)-bis-formamide]

USES: Fungicide.

MANUFACTURER'S NAME/ADDRESS	U.N. NUMBER:	Not Applicable
BASF Australia Ltd Norwest Business Park, 7 Maitland Place Baulkham Hills NSW 2153	DANGEROUS GOODS CLASS:	Not Applicable
	SUBSIDIARY RISK:	Not Applicable
	HAZCHEM CODE:	Not Applicable
	POISONS SCHEDULE:	6
	PACKAGING GROUP:	Not Applicable
	EPG:	Not Applicable

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE AND ODOUR: Light brown liquid with weak amine odour.

BOILING POINT:	Not available	DENSITY kg/L:	1.06-1.08
VAPOUR PRESSURE:	1.07 mBar	MELTING POINT °C:	< 0
VAPOUR DENSITY:	Not available	EVAPORATION RATE:	Not available
SOLUBILITY (WATER):	Emulsifiable	PERCENT VOLATILES:	47.6% m/v
FIRE/EXPLOSION HAZARD FLASH POINT °C	70	AUTOIGNITION °C:	363
LEL:	2.2% v/v	UEL:	16% v/v

INGREDIENTS

INGREDIENT	PROPORTION (w/v)	CAS No.
TRIFORINE	19.0%	26644-46-2
DIMETHYL FORMAMIDE	23.8%	68-12-2
EMULSIFIERS	33.8%	
DEFOAMER	2.0%	
STABILISER	2.0%	
N-METHYL PYRROLIDONE	23.8%	872-50-4

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HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE EFFECTS

No adverse health effects are expected if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms that may occur if the product is mishandled are: nausea, vomiting, convulsions.

SWALLOWED

Slightly toxic.

EYE

Irritating to eyes.

SKIN

Harmful in contact with skin.
Irritating to skin.

INHALED

May be harmful by inhalation.

CHRONIC EFFECTS

Chronic feeding studies in animals do not indicate any cumulative toxicity and show that the product is neither a carcinogen nor a teratogen. Studies with the solvent dimethylformamide at high doses in animals, have indicated embryotoxicity by various routes of exposure.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre (phone 131126). If swallowed, DO NOT induce vomiting. Give a glass of water. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

SWALLOWED

If swallowed, do NOT induce vomiting, give a glass of water

EYE

In case of contact with eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

SKIN

Remove contaminated clothing and wash skin thoroughly with soap and water. Seek medical attention if irritation persists.

INHALED

Remove to fresh air.

ADVICE TO DOCTOR

SAPROL contains triforine, a fungicide in dimethylformamide and N-methyl pyrrolidone which represent the main danger. Treat symptomatically. If indicated, lavage with cuffed tube.

MSDS - SAPROL FUNGICIDE

TOXICITY

No LD₅₀ data is available for SAPROL. The following data is for technical triforine.

Acute toxicity LD₅₀ (mg / kg)

Rat oral > 16,000

Rat dermal > 10,000

PRECAUTIONS FOR USE

EXPOSURE LIMITS

Threshold Limit Value (TLV) - 30mg/m³ (skin) TWA ACGIH (dimethyl formamide).

ENGINEERING CONTROLS

Do NOT inhale vapour or spray mist.

PERSONAL PROTECTION

Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. Do NOT inhale spray mist. When preparing and using the spray, wear elbow length butyl rubber gloves and face shield. If product on skin, immediately wash area with soap and water. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield and contaminated clothing.

FLAMMABILITY

Flammable.

Isolate from sources of heat, naked flames and sparks.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store in the closed, original container in a well-ventilated and cool as possible, separate building or room away from children, animals and unauthorized persons. Store away from food, foodstuffs, drink or clothing. Store separately from insecticides, herbicides, seeds or fertilizers. Do NOT store for long periods in direct sunlight.

Isolate from sources of heat, naked flames or sparks.

Ensure containers are correctly labelled and securely sealed.

Eye-wash and washing facilities must be readily available. For disposing spills have lime, absorbent material and open head drums on hand.

SPILLS AND DISPOSAL

Clear area of all unprotected personnel. Wear full protective equipment including breathing apparatus. Stop leak if safe to do so by manoeuvring the container. Decant leaking container into a clean empty drum remote from the storage area and label. If the leaking container can be repacked, contact BASF Australia Ltd, so that an overdrum and transport for return to a nominated BASF location can be arranged.

Do NOT flush to drains or sewers. Do NOT contaminate streams, rivers or water courses.

MSDS - SAPROL FUNGICIDE

Absorb spill in lime, sand, earth or non-combustible absorbent material. Place material in open top drum, clean up with small amount of detergent and water, absorb and place in drum. Seal drum and bury in an area approved by the local waste disposal authority.

Wash or wipe down protective equipment in detergent solution and dry. Wash overalls, destroy if heavily contaminated.

Triple rinse empty container with water. Add the rinsate to the spray vat or dispose of with empty container. Destroy empty container by breaking, crushing or puncturing and take to an approved landfill or bury under at least 50 cm of soil in a non-crop, non-pasture area away from water sources or homes. Do NOT burn empty container or product.

FIRE/EXPLOSION HAZARD

Explosive air-vapour mixture may form. Poisonous and corrosive gases are given off during fire. Fog, alcohol resistant foam, carbon dioxide or dry chemical extinguishers required. Ensure respiratory equipment is available.

Advise Fire Brigade of nature of hazard. Wear full protective equipment, including breathing apparatus. Remove drums from site of fire, if possible, as overheating may cause some of the drums to explode. Cool surrounding containers with a fine water spray.

Contain run-off.

OTHER INFORMATION

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Do NOT contaminate reservoirs, lakes, ponds or creeks with SAPROL FUNGICIDE or empty container.

DISCLAIMER

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. It should read taking into account how the product is handled in your particular situation and how it is used in conjunction with other products.

CONTACT POINT: BASF Australia Ltd

TELEPHONE: 1 800 635 550

EMERGENCY: 1 800 033 111

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