



IVORYCHEM PTE LIMITED
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Email: contact@ivorychem.com
Web: www.ivorychem.com
Co. Registration No. 200405572W
GST Registration No. 200405572W

MATERIAL SAFETY DATA SHEET

ARREST 25 EC Fungicide

Version: Global
Date Approved:
Revision No: 1

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ARREST 25 EC Fungicide
ACTIVE INGREDIENT: Propiconazole
CHEMICAL FAMILY: NA
MOLECULAR FORMULA: NA

MANUFACTURER

IVORYCHEM PTE LTD
15 BEACH ROAD
BEACH CENTRE
#02-09
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Tel: +65 6337 7765
Fax: +65 6337 7730

Emergency Telephone Numbers:

Emergency Phone contact@ivorychem.com (Please refer local label for Emergency Numbers in your region).

COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Wt.%	PEL/TLV	EC No.	EC Class
Propiconazole	60207-90-1	25%	None	None	None
Other Ingredient		75%	None	None	None

HAZARDS IDENTIFICATION

Human health hazards: harmful if swallowed. Irritating to eye and skin. Skin sensitizer.
Environmental hazards: toxic to aquatic organisms.

FIRST AID MEASURES

Inhalation: Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician or Poison Control Centre immediately.
Skin contact: Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.



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Note to physician: There is no specific antidote for this product. Induce emesis or lavage stomach, taking care to avoid aspiration of stomach contents into lungs. Give a saline laxative and supportive therapy.

FIRE FIGHTING MEASURES

Extinguishing media

Suitable: water spray, fog or regular foam.

Special fire-fighting procedures: fight fire from a protected location. Dike fire control water for later disposal.

Hazardous thermal (De)composition products: NO_x, CO, CO₂ and chlorides.

Protection of fire fighters: wear suitable protective clothing. Self contained breathing apparatus.

ACCIDENTAL RELEASE MEASURES

Personal precautions: Refer to protective measures listed in section Handling and Storage. Keep people away from and upwind of spill/leak. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Remove all sources of ignition. Pay attention to flashback.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up: in the event of minor spillage: absorb in sand or other inert material. Use appropriate containment to avoid environmental contamination. In the event of major spillage: collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

HANDLING AND STORAGE

Do not contaminate water, food, or feed by storage or disposal.

Pesticide disposal: pesticides wastes may be toxic, improper disposal of unused pesticide, spray mixture or rinse water is a violation. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative for guidance in proper disposal methods.

Container storage: triple rinse container (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. Stay out of smoke from burning containers. For minor spills, leaks, etc. follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean up procedures and disposal of wastes.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Components	Exposure limits	Value type
Pirimiphos-methyl	3 mg/m ³	8 h TWA

ENGINEERING MEASURES

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapors are generated, use local exhaust ventilation controls. Assess



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exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.

PERSONAL PROTECTIVE EQUIPMENT

Protective measures: The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

Respiratory protection: A combination gas, vapor and particulate respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

Hand protection: Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.

Eye protection: If eye contact is possible, use tight-fitting chemical safety goggles.

Skin and body protection: Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.) Wear as appropriate: dust impervious protective suit

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: clear-brownish liquid

Odor: aromatic

Physical state: liquid (22°C)

Molecular weight: Propiconazole: 342.2

Density: 1.065-1.085 g/ml

pH: 7.2 (1% solution)

Flammability: non-flammable

Flash point: 62 °C (closed cup)

Explosion properties: not explosive

Viscosity: 45 CPS

STABILITY AND REACTIVITY

Stability: stable under normal conditions.

Conditions to avoid: protect from (sun)light, open flame and sources of heat. Decomposes upon heating.

Materials to avoid: avoid contact with: strong acids and strong bases.

Hazardous reactions: hazardous polymerization will not occur.

TOXICOLOGICAL INFORMATION

Acute oral toxicity:

LD50 male Rat, 2000 mg/kg

LD50 female Rat, 972 mg/kg

Acute dermal toxicity:

LD50 Rat, > 5000 mg/kg

Inhalation: LC50 > 2.04 mg/l, 4 hours (rat)

Skin irritation: moderate irritating (rabbit)

Eye irritation: Severe Irritating (rabbit)



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Sensitization: Sensitizer (guinea pig)
Common name: Propiconazole
Carcinogenic potential: not carcinogenic (rat)
Mutagenic potential: not mutagenic
Reproductive toxicity: not teratogenic in animal experiments

ECOLOGICAL INFORMATION

No ecological information is known on the product. The data below are for Propiconazole:

Common name: Propiconazole
Mobility: Propiconazole does not leach to ground water
Persistence/ degradability: rapidly degrades when exposed to sunlight and UV light.
Bioaccumulative potential: BCF < 100
Ecotoxicity: toxic to aquatic organisms, LC50 < 10mg/l; not toxic to bees; birds: LD50 > 2000mg/kg

DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.
Contaminated packaging: Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

TRANSPORT INFORMATION

Technical shipping name: fungicide
Freight class bulk: insecticides or fungicides; agricultural, N.O.S.
Freight class package: insecticides or fungicides; agricultural, N.O.S.
Product label: ARREST 25 EC Fungicide
DOT (domestic surface)
Hazardous class or division: non-regulated
IMO/IMDG CODE (ocean)
Hazard class division number: non-regulated
ICAO/IATA (air)
Hazard class division number: non-regulated

REGULATORY INFORMATION

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial and local laws and regulations.

OTHER INFORMATION

Section(s) Revised: New Format