

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name:	PROPICONAZOLE 25% EC
Use / description of product:	Use as an agricultural/horticultural fungicide
Company name:	INDOFIL INDUSTRIES LIMITED Kalpataru Square, 4th Floor, Kondivita Road, Off. Andheri Kurla Road, Andheri (E), Mumbai 400 059, Maharashtra, India Email: customercare@indofil.com Toll Free No.:1800-120-003-004

2. HAZARDS IDENTIFICATION**GHS Classification****Hazard Symbol****Signal word:****Hazard statement(s):****DANGER**

H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H316 Causes mild skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
P284 Wear respiratory protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P302 + P352 IF ON SKIN: Wash with soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS	%
Active ingredient (Propiconazole)	60207-90-13	25%
Inert ingredients	-----	75%

4. FIRST AID MEASURES

Most Important symptoms and effects, both acute and delayed

Skin contact

There may be mild irritation at the site of contact

Eye contact

There may be irritation and redness. The vision may become blurred

Ingestion

There may be soreness and redness of the mouth and throat

Description of first aid measures

In general

Never give fluids or induce vomiting if patient is unconscious or is having convulsions.

After Ingestion

Do not induce vomiting. Provided the patient is conscious. wash mouth with water and give plenty of water to drink. Consult a physician. The decision of whether to induce vomiting or not should be made by a physician.

After eye contact

Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

After skin contact

Immediately wash skin with soap and plenty of water. Consult a physician if irritation develops.

After Inhalation

Remove victim to fresh air. Consult a physician if irritation develops

Indication of any immediate medical attention and special treatment needed

Supportive care. No specific antidote. Treat symptomatically and give supportive therapy.

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Water spray. Carbon dioxide. Dry chemical powder.

Exposure hazards:

May form flammable / explosive dust-air mixture. In combustion emits toxic fumes of sulphur Oxides, nitrogen oxides, carbon dioxide / carbon monoxide.

Protection of fire-fighters:

Do not enter fire areas without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus when in close proximity to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Eliminate all sources of ignition. Use appropriate protection.

Environmental precautions:

Dispose of this material and its container at hazardous or special

Clean-up procedures:

waste collection point if the product has contaminated surface water, inform the appropriate authorities.

Transfer to a closable, labelled salvage container for disposal by an appropriate method. Clean up spills as soon as possible, using an absorbent material to collect it.

7. HANDLING AND STORAGE**Handling requirements:**

Avoid ingestion, skin and eye contact. Prevent entry to sewers and public waters. When using, do not eat, drink or smoke.

Storage conditions:

Store in tightly closed, well ventilated area away from heat, sparks, open flame. Keep in original containers. Keep out of reach of children. Never allow the product to become wet during storage. This may lead to chemical changes, which will reduce the effectiveness as a fungicide.

Suitable packaging:

Must only be kept in original packaging.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Engineering measures:**

Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

Respiratory protection:

Wear approved respirator.

Hand protection:

Wear protective gloves
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Eye protection:

Safety goggles or face shields.

Skin protection:

Mixers and loaders must wear overalls, protective goggles and chemical-resistant apron.

Applicators and other handlers must wear overalls, goggles and waterproof gloves. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

9. PHYSICAL AND CHEMICAL PROPERTIES**State:**

Liquid

Colour:

Clear Brown

Odour:

Not available

Solubility in water:

Forms emulsion in water

pH:

5 To 8

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to avoid:	Direct sunlight, sources of heat, open flame. Decomposes upon heating.
Hazardous decomp. products:	Thermal decomposition may generate: Carbon monoxide, carbon dioxide, nitrogen oxides, chlorides.

11. TOXICOLOGICAL INFORMATION

Hazardous ingredients:	PROPICONAZOLE
<u>Acute toxicity (Assessment largely or completely based on data for active substance)</u>	
Acute Oral LD ₅₀ (Rat)	1517 mg/kg
Acute Dermal LD ₅₀ (Rabbits)	>4000 mg/kg
Acute Inhalation LD ₅₀	> 5.8 (4 h) mg/l
EYE Irritation (Rabbit)	Not an irritant
SKIN Irritation (Rabbit)	Not an irritant
Skin Sensitization (Guinea Pig)	Sensitizer

12. ECOLOGICAL INFORMATION

Ecotoxicity: (Assessment largely or completely based on data for active substance)

Aquatic toxicity: Material is very toxic to aquatic organisms.

Fish

LC₅₀ (96 h,) Rainbow Trout 4.3 mg/l,
carp 6.8mg/l

Algae EC₅₀ (72 hr) *Pseudokirchneriella subcapitata* 2.05 mg/l

Daphnia EC₅₀ (48 hr) EC₅₀ 0.77 mg/l

Bird

Acute Oral, LD₅₀ (9-11 d) Mallard ducks > 2510 mg/kg
Acute dietary, LC₅₀ (5 d) Bobwhite quail >5620; mallard ducks > 5620 mg/kg diet.

Honey Bee

LD₅₀ (oral) > 100 µg/bee;
LD₅₀ (contact) > 100 µg/bee.

Earthworm

LC₅₀ (14 d) > 686 mg/kg dry soil.

Environmental Fate

Animals:

After oral administration to rats, propiconazole is rapidly absorbed and also rapidly and almost completely eliminated with urine and faeces.

Plants: Degradation proceeds through hydroxylation of the n-propyl side-chain and deketalisation of the dioxolan ring
Partition coefficient, n-octanol/water (log Pow): 1.38

Soil / Environment: The main degradation pathways are hydroxylation of the propyl side-chain and the dioxolane ring, leading finally to formation of 1,2,4-triazole

13. DISPOSAL CONSIDERATIONS

Disposal operations: Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility.

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

U.S> Department of Transportation (DOT)

Bulk

UN no: 3082

Shipping name: Environmentally Hazardous Substance, liquid, n.o.s. (25% Propiconazole)

Hazard Class: 9

Packing group: III

Land Transport (ADR / RID)

UN no: 3082

Shipping name: Environmentally Hazardous Substance, liquid, n.o.s. (25% Propiconazole)

Hazard Class: 9

Packing group: III

Marine Transport (IMDG / IMO)

UN no: 3082

Shipping name: Environmentally Hazardous Substance, liquid, n.o.s. (25% Propiconazole)

Hazard Class: 9

Packing group: III

Marine pollutant: Yes

EmS: F-A, S-F

Air transport (IATA / ICAO)

UN no: 3082
Shipping name: Environmentally Hazardous Substance, liquid, n.o.s.
(25% Propiconazole)
Hazard Class: 9
Packing group: III
Cargo Packing instructions: ---

15. REGULATORY INFORMATION

Classification and User Label Information

Hazard Symbol



Xn - Harmful..

Risk Phrases

R22 - Harmful if swallowed.
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S35 - This material and its container must be disposed of in a safe way.
S57 - Use appropriate containment to avoid environmental contamination. To avoid risks to man and the environment, comply with the instructions for use

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.