



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

#### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1 Product identifier

**Product name** : DIFENCONAZOLE 13.9 + PROPICONAZOLE 13.9% EC

##### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Use** : Fungicide

##### 1.3 Details of the supplier of the safety data sheet

**Company** Shreeji Pesticides Pvt. Ltd  
69/P, Village - Manjusar  
Taluka - Savli  
Dist. Vadodara - 391775 (Gujarat) India

**Telephone** : +91 2667 264701

**Email** : [info@shreejipesticides.com](mailto:info@shreejipesticides.com)

**Website** : [www.shreejipesticides.com](http://www.shreejipesticides.com)

#### SECTION 2. HAZARDS IDENTIFICATION

##### 2.1 Classification of the substance or mixture

Classification according to Regulation (EU) 1272/2008

Aspiration hazard	Category 1	H304
Eye irritation	Category 2	H319
Acute aquatic toxicity	Category 1	H400
Chronic aquatic toxicity	Category 1	H410



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

#### 2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms		
Signal Word	:	Danger
Hazard Statements	:	H304 May be fatal if swallowed and enters airways H319 Causes serious eye irritation H335 May cause respiratory irritation H410 Very toxic to aquatic life with long lasting effects
Precautions Statements	:	P102 Keep out of reach of children P280 Wear protective gloves/protective clothing/eye protection/face protection P301/P310 IF SWALLOWED: immediately call a POISON CENTRE or doctor/physician P305/P351/P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do. Continue rinsing. P331 Do NOT induce vomiting P391 Collect spillage P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed for as non-hazardous waste.
Supplemental Information	:	EUH066 Repeated exposure may cause skin dryness or cracking EUH401 To avoid risks to human health and the environment comply with the instructions for use. Contains propiconazole. May produce an allergic reaction.

Hazardous components which must be listed on the label:

- solvent naphtha (petroleum), highly arom.

#### 2.3 Other hazards

None known.



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

##### 3.2 Mixtures

##### Hazardous components

Chemical Name	CAS No. EC No. Registration Number	Classification (REGULATION (EC) No. 1272/2008	Concentration
solvent naphtha (petroleum), highly arom.	64742-94-5 265-198-5 01-2119451097-39	Asp. Tox.1; H304 Aquatic Chronic2; H411	45 - 60 % W/W
propiconazole	60207-90-1 262-104-4	Acute Tox.4; H302 Skin Sens.1B; H317 Aquatic Acute1; H400 Aquatic Chronic1; H410	13.9 % W/W
difenoconazole	119446-68-3	Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	13.9 % W/W
poly(oxy-1,2-ethanediyl), alpha-9-octadecenyl-omega-hydroxy-, (Z)-	9004-98-2	Acute Tox.4; H302 Eye Dam.1; H318	1 - 5 % W/W
Calcium bis(dodecylbenzenesulphonate), branched	70528-83-5 68953-96-8 26264-06-2 11117-11-6 274-654-2 273-234-6 234-360-7	Eye Dam.1; H318 Skin Irrit.2; H315 Aquatic Chronic2; H411	1 - 5 % W/W
2-methylpropan-1-ol	78-83-1 201-148-0 01-2119484609-23-0 012	Flam. Liq.3; H226 STOT SE3; H335 Skin Irrit.2; H315 Eye Dam.1; H318 STOT SE3; H336	1 - 5 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### SECTION 4. FIRST AID MEASURES

##### 4.1 Description of first aid measures

- General Advice : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control centre or physician, or going for treatment.
- Inhalation : Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Control Centre immediately.
- Skin Contact : Take off all contaminated clothing immediately. Wash off immediately with 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



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

Ingestion : 15 minutes. Remove contact lenses. Immediate medical attention is required.  
: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting; contains petroleum distillates and/or aromatic solvents.

#### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms** : Aspiration may cause pulmonary oedema and pneumonitis.

#### 4.3 Indication of any immediate medical attention and special treatment needed

**Medical advice** : There is no specific antidote available. Treat symptomatically. Do NOT induce vomiting; contains petroleum distillates and/or aromatic solvents.

### SECTION 5. FIREFIGHTING MEASURES

- 5.1 Extinguishing media**  
Extinguishing media - small fires  
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  
Extinguishing media - large fires  
Use alcohol-resistant foam or water spray.  
Do not use a solid water stream as it may scatter and spread fire.
- 5.2 Special hazards arising from the substance or mixture**  
As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
- 5.3 Advice for fire-fighters:**  
Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Refer to protective measures listed in sections 7 and 8.
- 6.2 Environmental precautions:**  
Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
- 6.3 Methods and materials for containment and cleaning up**  
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
- 6.4 Reference to other sections**  
Refer to protective measures listed in sections 7 and 8.  
Refer to disposal considerations listed in section 13.



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

#### SECTION 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling**  
No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.
- 7.2 Conditions for safe storage, including any incompatibilities**  
No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.
- 7.3 Specific end use(s)**  
Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### 8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
propiconazole	8 mg/m <sup>3</sup>	8 h TWA	SYNGENTA
difenoconazole	8 mg/m <sup>3</sup>	8 h TWA	SYNGENTA
2-methylpropan-1-ol	1,600 ppm 50 ppm 100 ppm 50 ppm 100 ppm 50 ppm, 231 mg/m <sup>3</sup>	8 h TWA 15 min STEL 8 h TWA 8 h TWA 8 h TWA	NIOSH SUVA SUVA ACGIH DFG UK HSE
solvent naphtha (petroleum), highly arom.	20 ppm, 100 mg/m <sup>3</sup>	8 h TWA	SUPPLIER

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

##### 8.2 Exposure controls

- 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 vapours are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.
- 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



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

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Hand 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.
Eye Protection	:	Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.
Skin and body protection	:	If eye contact is possible, use tight-fitting chemical safety goggles.
	:	No special protective equipment required. Select skin and body protection based on the physical job requirements.

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#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

##### 9.1 Information on basic physical and chemical properties

Physical State	:	Liquid
Form	:	Liquid
Colour	:	Yellow to dark brown
Odour	:	Aromatic
Odour Threshold	:	No data available
pH	:	4 - 8 at 1 % w/v (as an emulsion)
Melting point/range	:	< -10 °C
Boiling point/boiling range	:	> 220 °C
Flash point	:	71 °C at 757 mmHg Pensky-Martens c.c.
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	1.08 g/cm <sup>3</sup> at 20 °C
Solubility in other solvents	:	No data available
Partition Coefficient n-octanol/water	:	No data available
Autoignition temperature	:	455 °C
Thermal decomposition	:	No data available
Viscosity, dynamic	:	34.6 mPa.s at 20 °C 13.1 mPa.s at 40 °C
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Not oxidizing

##### 9.2 Other information

Miscibility	:	miscible
Surface tension	:	36 mN/m at 25 °C

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#### SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity	:	No information available.
10.2 Chemical Stability	:	No information available.
10.3 Possibility of hazardous reactions	:	None known. Hazardous polymerisation does not occur.
10.4 Conditions to avoid	:	No information available
10.5 Incompatible materials	:	No information available



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

**10.6 Hazardous decomposition products** : Combustion or thermal decomposition will evolve toxic and irritant vapours.

#### SECTION 11. TOXICOLOGICAL INFORMATION

##### 11.1 Information on toxicological effects

**Acute oral toxicity** : LD50 male and female rat >2,000 mg/kg  
The toxicological data has been taken from products of similar composition

**Acute inhalational toxicity**  
Propiconazole : LD50 male and female rat >5,800 mg/m<sup>3</sup>, 4 hr  
difenconazole : LD50 male and female rat >3,300 mg/m<sup>3</sup>, 4 hr

**Acute dermal toxicity** : LD50 male and female rat >2,000 mg/kg

**Skin corrosion/irritation** : Rabbit. Non-irritating  
The toxicological data has been taken from products of similar composition

**Serious eye damage/eye irritation** : Rabbit. Irritating  
The toxicological data has been taken from products of similar composition

**Respiratory or skin sensitisation** : Maximisation Test guinea pig not sensitising  
The toxicological data has been taken from products of similar composition

**Germ cell mutagenicity**  
solvent naphtha (petroleum), highly aromatic : Did not show mutagenic effects in animal experiments.  
propiconazole : Did not show mutagenic effects in animal experiments.  
difenconazole : Did not show mutagenic effects in animal experiments.  
2-methylpropan-1-ol : Did not show mutagenic effects in animal experiments.

**Carcinogenicity**  
solvent naphtha (petroleum), highly aromatic : Did not show carcinogenic effects in animal experiments.  
propiconazole : Did not show carcinogenic effects in animal experiments.  
difenconazole : Did not show carcinogenic effects in animal experiments.  
2-methylpropan-1-ol : Did not show carcinogenic effects in animal experiments.

**Reproductive toxicity**  
solvent naphtha (petroleum), highly aromatic : Did not show reproductive toxicity effects in animal experiments.  
propiconazole : Did not show reproductive toxicity effects in animal experiments.  
difenconazole : Did not show reproductive toxicity effects in animal experiments.  
2-methylpropan-1-ol : Did not show reproductive toxicity effects in animal experiments.

**STOT – single exposure**  
2-methylpropan-1-ol : May cause drowsiness or dizziness.

**STOT – repeated exposure**  
solvent naphtha (petroleum), highly aromatic : No adverse effect has been observed in chronic toxicity tests.  
propiconazole : No adverse effect has been observed in chronic toxicity tests  
difenconazole : No adverse effect has been observed in chronic toxicity tests  
2-methylpropan-1-ol : No adverse effect has been observed in chronic toxicity tests

#### SECTION 12. ECOLOGICAL INFORMATION

##### 12.1 Toxicity

**Toxicity to fish** : LC50 *Oncorhynchus mykiss* (rainbow trout), 4.7 mg/l, 96 h  
Based on test results obtained with similar product.

**Toxicity to aquatic invertebrates** : EC50 *Daphnia magna* Straus 2.7 mg/l, 48 h  
Based on test results obtained with similar product

**Toxicity to aquatic plants** : EbC50 *Pseudokirchneriella subcapitata* (green algae) 0.23 mg/l, 72 h  
Based on test results obtained with similar product



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

#### 12.2 Persistence and degradability

Biodegradability	
solvent naphtha (petroleum),highly arom.	Expected to be biodegradable
propiconazole	Not readily biodegradable
Stability in water	
Propiconazole	: Degradation half life: 28 - 64 d. Stable in water
difenoconazole	: Degradation half life: 1 d. Not persistent in water
Stability in soil	
Propiconazole	: Degradation half life: 66-170 d. Not persistent in soil
difenoconazole	: Degradation half life: 149 - 187 d. Not persistent in soil

#### 12.3 Bioaccumulative potential

solvent naphtha (petroleum),highly arom.	: Accumulation in aquatic organisms is expected.
propiconazole	: Low to medium mobility in soil.
difenoconazole	: Difenoconazole has high potential to bioaccumulate.

#### 12.4 Mobility in soil

propiconazole	:Low to medium mobility in soil.
Difenoconazole	:Low mobility in soil

#### 12.5 Results of PBT and vPvB assessment

Propiconazole, difenoconazole	: These substances are not considered to be persistent, bioaccumulating nor toxic (PBT). These substances are not considered to be very persistent nor very bioaccumulating (vPvB).
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#### 12.6 Other adverse effects

Classification of the product is based on the summation of the concentrations of classified components.

### SECTION 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

<b>Product</b>	: 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.
<b>Contaminated packaging</b>	: Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.

### SECTION 14. TRANSPORT INFORMATION

#### Land transport (ADR/RID)

14.1	UN Number	:	UN 3082
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE AND DIFENOCONAZOLE)



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

14.4	Packing Group	:	III
	Labels	:	9
14.5	Environmental hazards	:	Environmentally hazardous

#### Sea transport(IMDG)

14.1	UN Number	:	UN 3082
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE AND DIFENOCONAZOLE)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	:	III
	Labels	:	9
14.5	Environmental hazards	:	Marine pollutant

#### Air transport (IATA-DGR)

14.1	UN Number	:	UN 3082
14.2	UN proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE AND DIFENOCONAZOLE)
14.3	Transport hazard class(es)	:	9
14.4	Packing Group	:	III
	Labels	:	9
14.6	Special precautions for user	:	none

#### 14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

## SECTION 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### GHS-Labeling

#### Hazard pictograms



Signal Word : Danger

Hazard Statements : H227 Combustible liquid  
: H303 May be harmful if swallowed  
: H304 May be fatal if swallowed and enters airways  
: H316 Causes mild skin irritation  
: H319 Causes serious eye irritation  
: H335 May cause respiratory irritation  
: H410 Very toxic to aquatic life with long lasting effects

Precautions Statements : P102 Keep out of reach of children  
: P280 Wear protective gloves/protective clothing/eye protection/face



## Material safety data sheet

### Difenconazole 13.9 + Propiconazole 13.9% EC

	: P301/P310	protection IF SWALLOWED: immediately call a POISON CENTRE or doctor/physician
	: P305/P351/ P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do. Continue rinsing.
	: P331	Do NOT induce vomiting
	: P391	Collect spillage
	: P501	Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed for as non-hazardous waste.
Supplemental Information	: EUH066	Repeated exposure may cause skin dryness or cracking
	: EUH401	To avoid risks to human health and the environment comply with the instructions for use. Contains propiconazole. May produce an allergic reaction.

Hazardous components which must be listed on the label:

- solvent naphtha (petroleum), highly arom.

#### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

#### SECTION 16. OTHER INFORMATION

Approval number, MAPP 16587.

Use plant protection products safely. Always read the label and product information before use.  
Based upon SDS release dated 19/09/2013, version 6 with local amendment.

Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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