

**IVORYCHEM PTE LIMITED**

15 Beach Road #02-09, Beach Centre  
Singapore 189677  
Tel: +65 – 6337 7765  
Fax: +65 – 6337 7730  
Email: [contact@ivorychem.com](mailto:contact@ivorychem.com)  
Web: [www.ivorychem.com](http://www.ivorychem.com)  
Co. Registration No. 200405572W  
GST Registration No. 200405572W

**MATERIAL SAFETY DATA SHEET****LASER 12 SC FUNGICIDE**

**Version:** Global  
**Date Approved:** 08/13/1998  
**Revision No:** 1

**CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** LASER® 12 SC FUNGICIDE  
**ACTIVE INGREDIENT:** Epoxiconazole  
**CHEMICAL FAMILY:**  
**CHEMICAL NAME:**  
**MOLECULAR FORMULA:**  
**SYNONYMS:**

**MANUFACTURER**

IVORYCHEM PTE LTD  
15 Beach Road, #02-09  
Beach Centre  
Singapore 189677  
Tel: +65 63377765  
Fax: +65 63377730

**Emergency Telephone Numbers:**

**Emergency Phone** [contact@ivorychem.com](mailto:contact@ivorychem.com) (Please refer local label for Emergency Numbers in your region).

**COMPOSITION / INFORMATION ON INGREDIENTS**

**CHEMICAL NATURE:** Crop protection agents, fungicide, suspension concentrate (SC)  
**HAZARDOUS INGREDIENTS:** solvent naphtha  
**CONTENT (W/W):** 15,9 %  
**CAS NUMBER:** 64742-94-5  
**EG-NUMBER:** 265-198-5 Epoxiconazole  
**CONTENT (W/W):** 11,9 %  
**CAS NUMBER:** 106325-08-0  
**INDEX-NUMBER:** 613-175-00-9

The wording of the hazard symbols and R-phrases is specified in chapter 16 if dangerous ingredients are mentioned.

**HAZARDS IDENTIFICATION**

Possible risks of irreversible effects.  
Possible risk of impaired fertility.  
Possible risk of harm to the unborn child.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**FIRST AID MEASURES**



## IVORYCHEM PTE LIMITED

15 Beach Road #02-09, Beach Centre

Singapore 189677

Tel: +65 – 6337 7765

Fax: +65 – 6337 7730

Email: [contact@ivorychem.com](mailto:contact@ivorychem.com)

Web: [www.ivorychem.com](http://www.ivorychem.com)

Co. Registration No. 200405572W

GST Registration No. 200405572W

**GENERAL ADVICE:** Avoid contact with the skin, eyes and clothing. Remove contaminated clothing. If difficulties occur: Obtain medical attention. Show container, label and/or safety data sheet to physician.

**IF INHALED:** Keep patient calm, remove to fresh air, seek medical attention.

**ON SKIN CONTACT:** Wash thoroughly with soap and water.

**ON CONTACT WITH EYES:** Wash affected eyes for at least 15 minutes under running water with eyelids held open.

**ON INGESTION:** Rinse mouth and then drink plenty of water.

**NOTE TO PHYSICIAN:** Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

### FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Water spray, foam, dry extinguishing media, carbon dioxide

**SPECIFIC HAZARDS:** Carbon monoxide, hydrogen chloride, hydrogen fluoride, nitrogen oxides

**SPECIAL PROTECTIVE EQUIPMENT:** Wear self-contained breathing apparatus and chemical-protective clothing.

**FURTHER INFORMATION:** In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect separately contaminated extinguishing water; do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

### ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Remove contaminated clothes, undergarments and shoes immediately.

**ENVIRONMENTAL PRECAUTIONS:** Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### METHODS FOR CLEANING UP OR TAKING UP

**FOR LARGE AMOUNTS:** Pump off product.

**FOR RESIDUES:** Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

### HANDLING AND STORAGE

#### HANDLING

No special measures necessary provided product is used correctly.

**PROTECTION AGAINST FIRE AND EXPLOSION:** No special precautions necessary.

#### STORAGE

Segregate from foods and animal feeds.

#### STORAGE STABILITY:

**STORAGE DURATION:** 24 Months

**PROTECT FROM TEMPERATURES BELOW:** 5 °C

**PROTECT FROM TEMPERATURES ABOVE:** 40 °C

### EXPOSURE CONTROLS / PERSONAL PROTECTION



## IVORYCHEM PTE LIMITED

15 Beach Road #02-09, Beach Centre

Singapore 189677

Tel: +65 – 6337 7765

Fax: +65 – 6337 7730

Email: contact@ivorychem.com

Web: www.ivorychem.com

Co. Registration No. 200405572W

GST Registration No. 200405572W

### PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY PROTECTION:** Particle filter EN 143 Type P2, medium efficiency, (solid and liquid particles of harmful substances).

**HAND PROTECTION:** Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinyl chloride (0.7 mm) and other

**EYE PROTECTION:** Tightly fitting safety goggles (splash goggles) (EN 166)

**BODY PROTECTION:** Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to DIN-EN 465).

**GENERAL SAFETY AND HYGIENE MEASURES:** Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Females of childbearing age should not come into contact with the product. Keep away from food, drink and animal feeding stuffs. Store work clothing separately. No eating, drinking, smoking or snuff taking at the place of work. Hands and/or face should be washed before breaks and at the end of the shift.

### PHYSICAL AND CHEMICAL PROPERTIES

**FORM:** liquid

**COLOUR:** pale beige

**ODOUR:** faintly aromatic

**PH VALUE:** 6 – 8 (20 °C)

**CRYSTALLIZATION TEMPERATURE:** -11,5 °C

**FLASH POINT:** > 100 °C

**DENSITY:** 1,02 - 1,08 g/cm<sup>3</sup> (20 °C)

**SOLUBILITY IN WATER:** dispersible

**SURFACE TENSION:** approx. 35,1 mN/m (20 °C; 2,0 %) approx. 35,3 mN/m (20 °C; 1,0 %)

**VISCOSITY, DYNAMIC:** approx. 140 mPa (20 °C)

### STABILITY AND REACTIVITY

**THERMAL DECOMPOSITION:** No decomposition if used correctly.

**SUBSTANCES TO AVOID:** No substances known that should be avoided.

**HAZARDOUS REACTIONS:** No hazardous reactions known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** No hazardous decomposition products if stored and handled as prescribed/indicated.

### TOXICOLOGICAL INFORMATION

**LD50/ORAL/RAT:** > 2,200 mg/kg

The statement for acute oral toxicity was derived from products of similar composition.

**LC50/BY INHALATION/RAT:** > 3.26 mg/l / 4 h

The statement for acute inhalation toxicity was derived from products of similar composition.

**LD50/DERMAL/RAT:** > 2,000 mg/kg

The statement for acute dermal toxicity was derived from products of similar composition.

**PRIMARY SKIN IRRITATION/RABBIT:** non-irritant

The statement for skin irritation was derived from products of similar composition.

**PRIMARY IRRITATIONS OF THE MUCOUS MEMBRANE/RABBIT:** non-irritant

**SENSITIZATION/GUINEA PIG:** Skin sensitizing effects were not observed in animal studies.

The statement for sensitization was derived from products of similar composition.



## IVORYCHEM PTE LIMITED

15 Beach Road #02-09, Beach Centre  
Singapore 189677  
Tel: +65 – 6337 7765  
Fax: +65 – 6337 7730  
Email: contact@ivorychem.com  
Web: www.ivorychem.com  
Co. Registration No. 200405572W  
GST Registration No. 200405572W

**ADDITIONAL INFORMATION:** Misuse can be harmful to health. technical material.

### ECOLOGICAL INFORMATION

#### ECOTOXICITY

**TOXICITY TO FISH:** Oncorhynchus mykiss/LC50 (96 h): 0.5 mg/l  
**AQUATIC INVERTEBRATES:** Daphnia magna/EC50 (48 h): 1.8 mg/l  
**AQUATIC PLANTS:** Ankistrodesmus bibraianus/EC50 (72 h): 0.81 mg/l

#### PERSISTENCE AND DEGRADABILITY

#### ELIMINATION INFORMATION

**EVALUATION:** Not easily biodegradable (by OECD criteria).

#### ADDITIONAL INFORMATION

#### OTHER ECOTOXICOLOGICAL ADVICE:

The product has not been tested. The statement has been derived from products of a similar structure and composition.

### DISPOSAL CONSIDERATIONS

Must be dumped or incinerated in accordance with local regulations.

**CONTAMINATED PACKAGING:** Packs that cannot be cleaned should be disposed of in the same manner as the contents.

### TRANSPORT INFORMATION

**PROPER SHIPPING NAME:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains fatty alcohol alkoxyate)

**UN NO.:** 3082

**DG CLASS:** 9

**SUBSIDIARY RISK CLASS:** NA

**PACKING GROUP:** III

**HAZCHEM:** 2[Z]

**MARINE POLLUTANT:** Yes

### REGULATORY INFORMATION

#### Regulations of the European union (Labeling) / National legislation/Regulations

Hazard symbol(s)

Xn Harmful.

R-phrase(s)

R40 (old) Possible risks of irreversible effects.

R62 Possible risk of impaired fertility.

R63 Possible risk of harm to the unborn child.

S-phrase(s)

S2 Keep out of reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S20/21 When using, do not eat, drink or smoke.

S36/37 Wear suitable protective clothing and gloves.

S46 If swallowed, seek medical advice immediately and show this container or label.



**IVORYCHEM PTE LIMITED**

15 Beach Road #02-09, Beach Centre

Singapore 189677

Tel: +65 – 6337 7765

Fax: +65 – 6337 7730

Email: [contact@ivorychem.com](mailto:contact@ivorychem.com)

Web: [www.ivorychem.com](http://www.ivorychem.com)

Co. Registration No. 200405572W

GST Registration No. 200405572W

**OTHER INFORMATION**

Section(s) Revised : New Format