

MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

PRODUCT NAME:	Epoxiconazole 250 g/l SC, Twiga-EpoX
COMPANY NAME:	Sinochem Ningbo Ltd.
COMMON NAME OF A.I.:	Epoxiconazole
CHEMICAL NAME:	(2RS, 3SR)-1-[3-(2-chlorophenyl)-2, 3-epoxy-2-(4-fluorophenyl)propyl]-1H-1, 2, 4-triazole
SYNONYM:	None
CHEMICAL FAMILY:	Triazole
CHEMICAL FORMULATION:	C ₁₇ H ₁₃ ClFN ₃ O
PRODUCT USE:	Fungicide
FORMULATION:	Suspension Concentrate

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT NAME	CAS NO.	CONTENT (% , w/v)
Epoxiconazole	106325-08-0	25
Other ingredients	none	78

SECTION 3. HAZARDS IDENTIFICATION

Health Hazards:

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.

SECTION 4. FIRST AID MEASURES

If contact skin, Remove contaminated clothing and shoes. Flush with water for 15 – 20 minutes and wash with soap and water.

If contact eye, Hold eye open and rinse slowly and gently with water for 15 – 20 minutes until no evidence of chemical remains. Get professional medical attention immediately.

If inhaled, Move person to fresh air. Get professional medical attention immediately.

If ingested, Never give fluids or induce vomiting if patient is unconscious or having convulsions. get professional medical attention immediately.

Note to physician:

There is no specific antidote if epixiconazole is ingested. Treat symptomatically. If large amount has been ingested and emesis is inadequate, lavage stomach.

SECTION 5. FIRE FIGHTING MEASURES
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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.

SECTION 6. 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.

SECTION 7. HANDLING AND STORAGE
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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

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION
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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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
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Form:	Liquid
Color:	Pale beige
Odor:	Faintly aromatic
pH value:	6 – 8 (20 °C)
Flash point:	> 100 °C
Density:	1.03 g/cm ³ (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)

SECTION 10. 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.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity for end product:**

Acute Oral Toxicity	Rat: LD50: > 2200 mg/kg
Acute Dermal Toxicity	Rabbit: LD50: > 2000 mg/kg
Acute Inhalation Toxicity	Rat: LC50 (4 h): > 3.0 mg/L
Skin Irritation	Rabbit: not a dermal irritant
Eye Irritation	Rabbit: not a eye irritant
Sensitization	Guinea pig: Not a sensitizer

SECTION 12. ECOLOGICAL INFORMATION

Fish toxicity:	LC50s (96 h) for bluegill sunfish 3.27 mg/l, for rainbow trout 5.97 mg/l
Bird toxicity:	Acute oral LD50 for bobwhite quail > 2000 mg/kg
Daphnia toxicity:	LC50 (48 h) for Daphnia 8.8 mg/l
Algae toxicity:	EC50 (72 h) for <i>Selenastrum caprocornutum</i> 3.07 mg/L
Bees:	LC50 (contact) > 100 µg/bee
Earthworms:	LC50 for <i>Eisenia foetida</i> > 1000 mg a.i./kg soil

SECTION 13. 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.

SECTION 14. TRANSPORT INFORMATION

Proper Shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
UN No.:	3082

DG Class: 9
Subsidiary Risk Class: NA
Packing Group: III
HAZCHEM: 2[Z]
Marine Pollutant: Yes

SECTION 15. REGULATORY INFORMATION

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

Hazard symbol(s)

Xn Harmful.

R-phrase(s)

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.

SECTION 16. OTHER INFORMATION

Revised Date: July 20, 2005

MSDS Number: SN609/250SC

Revision Summary:

To reflect database modification (no substantive changes - only related to system).

This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.