

SAFETY DATA SHEET



ENGULF™

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1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): A polyether-modified trisiloxane

Recommended use: A unique super penetrant and surfactant

Supplier: Etec Crop Solutions Limited

Emergency telephone number: 0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification:

Classification of the substance or mixture
Classification according to the Regulation (EC) No 1272/2008 (GHS)
Acute toxicity, Category 4, Inhalation, H332
Skin irritation, Category 2, H315
Chronic aquatic toxicity, Category 3, H412
Classification according to directives 1999/45/EC and 67/548/EEC
Irritating to eyes.
Harmful by inhalation.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Causes skin irritation.
Harmful to aquatic life with long lasting effects.

Required identification Details:

Precautionary Statements:
Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid release to the environment.
Wear protective gloves and eye/face protection.
Get medical advice/attention if you feel unwell.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Polyether-modified trisiloxane	Trade secret	> 75 - <= 100

4. FIRST-AID MEASURES

Description of necessary first aid measures:

General advice: Remove soiled or soaked clothing immediately

Effects and symptoms

First-aid measures

Inhalation:

Ensure supply of fresh air. In the event of symptoms seek Medical treatment.

Ingestion:

In the event of symptoms seek medical advice.

Skin contact:

In case of contact with skin wash off with soap and water. Consult a doctor if skin irritation persists.

Eye contact:

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice

Notes to a physician:

Workplace facilities:

Required Instructions:

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:

Extinguishing media :

Foam, carbon dioxide, dry powder, water spray.
Extinguishing media which shall not be used for safety reasons: Full water jet.

**Hazardous thermal
(de)composition products:**

In the event of fire the following can be released: - Carbon monoxide, carbon dioxide, silicon dioxide.
Under certain conditions of combustion traces of other toxic substances cannot be excluded.

Protection of fire-fighters:

Use self-contained breathing apparatus and wear full protective suit.
Do not inhale explosion and/or combustion gases
Further information : Collect contaminated fire-fighting water separately, must not be discharged into the drains.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protective equipment.

Environmental precautions:

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

Methods for cleaning up:

Take up with absorbent material (e.g. sand, sawdust, universal binder)
Dispose of absorbed material in accordance with regulations.

7. HANDLING AND STORAGE

Handling:

Formation of aerosols or vapours during processing and

application should be prevented. Wear respiratory protection when spraying.

General protective measures:

Avoid contact with eyes and skin. Do not inhale aerosols

Hygiene measures: Do not eat, drink or smoke when working. Wash hands before breaks and after work.

Remove soiled or soaked clothing immediately.

Use barrier skin cream.

Storage:

Conditions for safe storage, including any incompatibilities:

Advice on protection against fire and explosion: No special measures required.

Further information: Keep container tightly closed

Packaging materials:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Workplace exposure standards:

Application in the workplace:

**Exposure Standards outside:
The workplace:**

Engineering measures

Hierarchy of controls:

Exposure control measures:

No Hazard indication:

Ventilation specification:

Personal Protective Equipment

Detail specifications for equipment:

General protective measures:

Avoid contact with eyes and skin.

Do not inhale aerosols.

In case of formation of vapours/aerosols:

Short term: filter apparatus, Filter A-P2.

Impermeable protective clothing and a protective ointment is recommended.

Skin and body:

Rubber gloves, PVC gloves

Goggles, or face shield if necessary

Hands:

Eyes:

Do not eat, drink or smoke when working.

Wash hands before breaks and after work.

General hygiene:

Remove soiled or soaked clothing immediately.

Use barrier skin cream.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Colour:	yellow
Odour:	slight, typical
pH:	pH : 4 - 6
Vapour Pressure:	
Vapour Density:	
Boiling Point:	not measured
Freezing/melting point:	not measured
Solubility:	soluble
Specific gravity or density:	Density: 1,010 - 1,030 g/cm ³
Information for flammable material including:	
- Lower and upper flammability limits	
- Flashpoint (state test Method)	> 93 °C
Auto – ignition Temperature:	not measured
Octanol/water partition coefficient:	
Explosion properties:	not measured
Oxidation properties:	
Viscosity, kinematic:	30 - 80 mm ² /s

10. STABILITY AND REACTIVITY

Stability:
Conditions to avoid:
Materials to avoid:

Hazardous decomposition Products: None with proper storage and handling.

Hazardous polymerization:

Specific Data:

Hazardous reactions : No hazardous reactions with proper storage and handling.

11. TOXICOLOGICAL INFORMATION

Harmful by inhalation

Acute toxicity – Oral :

LD50 Species: rat Dose: > 5.000 mg/kg

Acute toxicity - Dermal :

LD50 Species: rat Dose: > 5.000 mg/kg

Acute toxicity – Inhalation:

LC50 aero. Species: rat Dose: 1,08 mg/l Exposure time: 4 h

Acute toxicity estimate dose:

11 mg/L

Skin irritation :	Species: rabbit slight irritant
Eye irritation:	Slight irritant effect - does not require labelling
Sensitization :	Species: Guinea pig Classification: Did not cause sensitization On laboratory animals. non-sensitizing
Common name :	
Chronic toxicity : Carcinogenicity:	
Mutagenicity:	
Reproduction toxicity:	
Other information :	Non-mutagenic. Irritant to eyes.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish :

Toxicity to daphniae :

Toxicity to algae :

The ecotoxicological data refer to the undiluted 100 % product.

Ecotoxicity

Fish	LC50 Species: zebra fish Dose: 18,1 mg/l Exposure time: 96 h
Daphnia magna	EC50 Species: Daphnia magna Dose: 28,3 mg/L Exposure time: 48 h
Algae	EC50 Species: Scenedesmus subspicatus Dose: 28,2 mg/L refer to biomass
	EC50 Species: Scenedesmus subspicatus Dose: 152,2 mg/l. Growth rate.
	The ecotoxicological data refer to the undiluted 100 % product.

13. DISPOSAL CONSIDERATIONS

Methods of disposal :

Product:	Ensure unwanted product is used by another operator strictly in accordance with label directions. Do not allow product to enter waterways, drains or sewers.
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Packaging:	Ensure container is completely empty. Recycle through the Agrecovery programme. If this is not possible, burn if permitted and circumstances, especially wind direction allow,
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otherwise bury in landfill.

14. TRANSPORT INFORMATION

International transport regulations

International transport regulations:

UN number: Not A Dangerous Good

Land - Road/Railway Not A Dangerous Good

Proper shipping name : Not A Dangerous Good

15. REGULATORY INFORMATION

ACVM Registered Number: Exempt from Registration
HSNO Approval Code: **HSR002503 [Group Standard]**

16. OTHER INFORMATION

Additional information:

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