

**ETHREL SL480 4X5L BOT NBC**Version 1 / EU
102000019401/7
Revision Date: 15.12.2009
Print Date: 18.01.2010**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name ETHREL SL480 4X5L BOT NBC
Product code (UVP) 05927277
Usage Growth regulator
Company Bayer CropScience AG
Alfred-Nobel-Straße 50
40789 Monheim am Rhein
Germany

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Responsible Department Material and Transport Safety Management
+49(0)2173-38-3409/4566
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Emergency telephone number +49(0)2133-51-4233 (Sicherheitszentrale Dormagen, Bayer AG)

2. HAZARDS IDENTIFICATION**Risk advice to man and the environment**

Risk of serious damage to eyes.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Chemical nature**

Soluble concentrate (SL)
Ethephon 480 g/l SL

Hazardous components

Chemical Name	CAS-No. / EC-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Ethephon	16672-87-0 240-718-3	C	R20/21, R34, R52/53	39,67

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES**General advice**

Remove contaminated clothing immediately and dispose of safely. When symptoms develop and persist, seek medical advice.

Inhalation

Move to fresh air. Keep patient warm and at rest.



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Skin contact

In case of contact with skin wash off immediately with polyethylene glycol 400, then with plenty of water. Get medical attention if irritation develops and persists.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion

Do NOT induce vomiting. Rinse out mouth and give water in small sips to drink. Monitor the acid-base status for metabolic acidosis, which should be treated with sodium bicarbonate as usual. Call a physician or poison control center immediately.

Notes to physician

Symptoms

Local:, burns on skin and mucosal tissues

Symptoms

Systemic:, gastro-intestinal irritation, This product causes reversible cholinesterase inhibition.

Risks

Must NOT be confused with organophosphorus compounds!

Treatment

Treat symptomatically.
Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.
There is no specific antidote.
Contraindication: atropine.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray
Foam
Carbon dioxide (CO₂)
Dry powder

Specific hazards during fire fighting

In the event of fire the following may be released:
Carbon monoxide (CO)
nitrogen oxides (NO_x)
Oxides of phosphorus
Hydrogen chloride (HCl)

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

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Keep people away from and upwind of spill/leak.
Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.
Use personal protective equipment.

Environmental precautions

Do not allow to get into surface water, drains and ground water.

Methods for cleaning up

Collect and transfer the product into a properly labelled and tightly closed container.
When picked up, treat product as prescribed in Ch. 13. "Disposal considerations".
Recover the product by pumping, suction or absorption using a dry and inert absorbent clay.

Additional advice

Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

7. HANDLING AND STORAGE**Storage**

Requirements for storage areas and containers

Keep containers tightly closed in a dry, cool and well-ventilated place.
Protect from freezing.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Temperature tolerance	min.	max.
	5 °C	40 °C

Suitable materials

HDPE (high density polyethylene)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection	No personal respiratory protective equipment normally required. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.
Hand protection	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

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Eye protection	Wear goggles conforming to EN166 (Field of Use 5 or equivalent).
Skin and body protection	Wear standard coverall and type 6 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
Hygiene measures	Wash hands immediately after work, if necessary take a shower. Smoking, eating and drinking should be prohibited in the application area.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	liquid
Colour	colourless to amber
Odour	characteristic

Safety data

pH	< 1 at 100 % (23 °C)
Ignition temperature	600 °C
Density	ca. 1,21 g/cm ³ at 20 °C
Water solubility	completely miscible
Partition coefficient: n-octanol/water	log Pow: -1,89
Surface tension	55,4 mN/m

10. STABILITY AND REACTIVITY

Hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions. Corrodes metals in the presence of water or moisture. Risk of ethylene emission in case of increasing pH. Stable under normal conditions.
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11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	LD50 (rat) > 2.000 mg/kg
Acute dermal toxicity	LD50 (rat) > 2.000 mg/kg
Skin Irritation	Slight irritant effect - does not require labelling. (rabbit)
Eye Irritation	In view of its pH being less than 2 the formulation is considered to be severely irritant to the eyes.

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Sensitisation Non-sensitizing. (guinea pig)

12. ECOLOGICAL INFORMATION

Biodegradability Readily biodegradable.

Ecotoxicity effectsToxicity to Fish LC50 (Rainbow trout (*Oncorhynchus mykiss*)) 720 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient ethephon.Toxicity to daphnia EC50 (Water flea (*Daphnia magna*)) > 1.000 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient ethephon.Toxicity to algae EC50 (*Chlorella vulgaris* (Fresh water algae)) 32 mg/l
Exposure time: 72 h
The value mentioned relates to the active ingredient ethephon.Toxicity to algae EC50 (*Selenastrum capricornutum*) 13 mg/l
Exposure time: 72 h
The value mentioned relates to the active ingredient ethephon.**13. DISPOSAL CONSIDERATIONS****Product**

In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

Contaminated packaging

Triple rinse containers.
Do not use containers for other products.
The empty containers must be taken, where possible, to a waste collection system licensed for waste management of packaging materials in agriculture.
Not completely emptied packagings should be disposed of as hazardous waste.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

14. TRANSPORT INFORMATION**ADR/RID/ADNR**

UN-Number	3265
Labels	8
Packaging group	III
Hazard no.	80
Description of the goods	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETHEPHON SOLUTION)
Tunnel Code	E

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This classification is in principle not valid for carriage by tank vessel on inland waterways.
Please refer to the manufacturer for further information.

IMDG

UN-Number	3265
Labels	8
Packaging group	III
EmS	F-A , S-B
Description of the goods	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETHEPHON SOLUTION)

IATA

UN-Number	3265
Labels	8
Packaging group	III
Description of the goods	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (ETHEPHON SOLUTION)

15. REGULATORY INFORMATION**Classification and labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.**

Classification:

Hazard warning labelling compulsory

Hazardous components which must be listed on the label:

- Ethephon

Symbol(s)

Xi Irritant

R-phrases)

R41 Risk of serious damage to eyes.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39 Wear eye/face protection.

S35 This material and its container must be disposed of in a safe way.

S57 Use appropriate container to avoid environmental contamination.

Exceptional labelling

To avoid risks to man and the environment, comply with the instructions for use.

Further information

WHO-classification: U (Unlikely to present acute hazard in normal use)

16. OTHER INFORMATION**Further information**

Text of R-phrases mentioned in Section 3

R20/21 Harmful by inhalation and in contact with skin.



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R34	Causes burns.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information given in this Data Sheet has been included in accordance with the guidelines established by Regulation (EC) 1907/2006. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.