

**LAMARDOR PRO FS180 4X5L BOT NBC**Version 1 / EU
1020000215281/7
Revision Date: 17.09.2009
Print Date: 29.09.2010**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name LAMARDOR PRO FS180 4X5L BOT NBC
Product code (UVP) 79463537
Usage seed treatment
Company Bayer CropScience AG
Alfred-Nobel-Straße 50
40789 Monheim am Rhein
Germany

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Responsible Department Material and Transport Safety Management
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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**

Possible risk of harm to the unborn child.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

Flowable concentrate for seed treatment (FS)
Fluopyram 20 g/l, Prothioconazole 100 g/l, Tebuconazole 60 g/l

Hazardous components

Chemical Name	CAS-No. / EC-No.	Symbol(s)	R-phrase(s)	Concentration [%]
Fluopyram	658066-35-4	N	R51/53	1,72
Prothioconazole	178928-70-6	N	R51/53	8,62
Tebuconazole	107534-96-3 4036402	Xn, N	R22, R51/53, R63	5,17
Polyarylphenylether sulfate, ammonium salt	119432-41-6	Xi	R36, R52/53	> 1,00 - < 25,00

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

4. FIRST AID MEASURES**Inhalation**

Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.



LAMARDOR PRO FS180 4X5L BOT NBC

Version 1 / EU
102000021528

2/7
Revision Date: 17.09.2009
Print Date: 29.09.2010

Skin contact

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water.

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. Call a physician or poison control center immediately. Rinse mouth.

Notes to Physician

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.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray
Carbon dioxide (CO₂)
Foam
Sand

Specific hazards during fire fighting

In the event of fire the following may be released:
Hydrogen cyanide (hydrocyanic acid)
Carbon monoxide (CO)
Nitrogen oxides (NO_x)

Special protective equipment for fire-fighters

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

Further information

Contain the spread of the fire-fighting media.
Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Avoid contact with spilled product or contaminated surfaces.
Use personal protective equipment.

Environmental Precautions

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

Methods for cleaning up

Clean contaminated floors and objects thoroughly, observing environmental regulations.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Keep in suitable, closed containers for disposal.

Additional Advice

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

**LAMARDOR PRO FS180 4X5L BOT NBC**Version 1 / EU
1020000215283/7
Revision Date: 17.09.2009
Print Date: 29.09.2010**7. HANDLING AND STORAGE****Handling**

Advice on safe handling

Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Storage

Requirements for storage areas and containers

Store in a place accessible by authorized persons only.

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

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Temperature tolerance	min.	max.
	-10 °C	40 °C

Suitable materials

HDPE (high density polyethylene)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Prothioconazole	178928-70-6	1,4 mg/m ³ (TWA)		OES BCS*
Tebuconazole	107534-96-3	0,2 mg/m ³ (TWA)		OES BCS*

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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

If product is handled while not enclosed, and if contact may occur:
Wear respirator with an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A or equivalent.
Suitable mask with particle filter P3 (European Norm 143)

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.

Eye protection

Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

Skin and body protection

complete suit protecting against chemicals
Wear standard coverall and type 3 suit.

**LAMARDOR PRO FS180 4X5L BOT NBC**Version 1 / EU
1020000215284/7
Revision Date: 17.09.2009
Print Date: 29.09.2010

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

- Avoid contact with skin, eyes and clothing.
- Keep working clothes separately.
- Wash hands immediately after work, if necessary take a shower.
- Remove soiled clothing immediately and clean thoroughly before using again.
- Garments that cannot be cleaned must be destroyed (burnt).
- Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form	liquid, suspension
Colour	red
Odour	weak, characteristic

Safety data

pH	4,0 - 7,0 at 100 % (23 °C)
Flash point	> 100 °C Not relevant; aqueous solution
Density	approx. 1,16 g/cm ³ at 20 °C

10. STABILITY AND REACTIVITY

Hazardous Reactions	No hazardous reactions when stored and handled according to prescribed instructions.
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11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD50 (rat) > 2.000 mg/kg
Acute Inhalation Toxicity	LC50 (rat) > 2,998 mg/l Exposure time: 4 h Highest attainable concentration.
Acute Dermal Toxicity	LD50 (rat) > 2.000 mg/kg
Skin Irritation	No skin irritation. (rabbit)
Eye Irritation	No eye irritation. (rabbit)
Sensitization	Non-sensitizing. (mouse) OECD Test Guideline 429, local lymph node assay (LLNA)

**LAMARDOR PRO FS180 4X5L BOT NBC**Version 1 / EU
1020000215285/7
Revision Date: 17.09.2009
Print Date: 29.09.2010**12. ECOLOGICAL INFORMATION****Ecotoxicity effects**

Toxicity to Fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 1,82 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient fluopyram.
Toxicity to Fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 1,83 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient prothioconazole.
Toxicity to Fish	LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 4,4 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient tebuconazole.
Toxicity to daphnia	EC50 (Water flea (<i>Daphnia magna</i>)) > 17 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient fluopyram. No acute toxicity was observed at its limit of water solubility.
Toxicity to daphnia	EC50 (Water flea (<i>Daphnia magna</i>)) 1,3 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient prothioconazole.
Toxicity to daphnia	EC50 (Water flea (<i>Daphnia magna</i>)) 2,79 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient tebuconazole.
Toxicity to algae	EC50 (<i>Pseudokirchneriella subcapitata</i>) 8,9 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient fluopyram.
Toxicity to algae	EC50 (<i>Pseudokirchneriella subcapitata</i>) 2,18 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient prothioconazole.
Toxicity to algae	EC50 (<i>Pseudokirchneriella subcapitata</i>) 3,8 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient tebuconazole.

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.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

**LAMARDOR PRO FS180 4X5L BOT NBC**Version 1 / EU
1020000215286/7
Revision Date: 17.09.2009
Print Date: 29.09.2010**14. TRANSPORT INFORMATION****ADR/RID/ADNR**

UN-Number	3082
Labels	9
Packaging group	III
Hazard no.	90
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE, PROTHIOCONAZOLE SOLUTION)
Tunnel Code	E

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	3082
Labels	9
Packaging group	III
EmS	F-A , S-F
Marine pollutant	Marine pollutant
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE, PROTHIOCONAZOLE SOLUTION)

IATA

UN-Number	3082
Labels	9
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TEBUCONAZOLE, PROTHIOCONAZOLE 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:

- Fluopyram
- Prothioconazole
- Tebuconazole

Symbol(s)

Xn Harmful

R-phrases)

R63 Possible risk of harm to the unborn child.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



LAMARDOR PRO FS180 4X5L BOT NBC

Version 1 / EU
102000021528

7/7
Revision Date: 17.09.2009
Print Date: 29.09.2010

S-phrases(s)

- | | |
|--------|--|
| S35 | This material and its container must be disposed of in a safe way. |
| S36/37 | Wear suitable protective clothing and gloves. |
| 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: III (Slightly hazardous)

16. OTHER INFORMATION

Further information

Text of R-phrases mentioned in Section 3

- | | |
|--------|---|
| R22 | Harmful if swallowed. |
| R36 | Irritating to eyes. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R63 | Possible risk of harm to the unborn child. |

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.
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