



SAFETY DATA SHEET

according to EC directive 2001/58/EC

Magdelin

Version 1 (UK)

Issue date 05/22/2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product information

Trade name : **Magdelin**

Usage : herbicide

Company : Nufarm UK Limited
Crabtree Manorway North
Belvedere
KENT DA17 6BQ
UK

Emergency telephone number : **+44 (0)20 8319 7222**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Suspo-emulsion (SE)
Contains Trifluralin 240g/l and Diflufenican 12.5g/l

Components	CAS-No.	EINECS-No. ELINCS-No.	Symbol(s):	R-phrases(s)	Concentration (w/w)
trifluralin	1582-09-8	216-428-8	Xi, N	R36, R43, R50/53	23.41 %
Diflufenican	83164-33-4			R52/53	1.22 %
1,2,4-trimethylbenzene	95-63-6	202-436-9	Xn, N	R10, R20, R36/37/38, R51/53	0.1% - 2%
naphthalene	91-20-3	202-049-5	Xn, N	R22, R40, R50/53	0.1% - 1%
2-(2-ethoxyethoxy)ethanol	111-90-0	203-919-7	Xi	R36	10% - 25%

3. HAZARDS IDENTIFICATION

Irritating to eyes.
May cause sensitization by skin contact.
Repeated exposure may cause skin dryness or cracking.
Vapours may cause drowsiness and dizziness.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

Skin contact : Remove and wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician.

Inhalation : Move to fresh air. If symptoms persist, call a physician.



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Ingestion : Do not induce vomiting. Rinse mouth. If swallowed, seek medical advice immediately and show this container or label.

Notes to physician

Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Specific hazards during fire fighting : In the event of fire (NO_x,CO_x,HF) may be formed.

Special protective equipment for fire-fighters : Wear self contained breathing apparatus for fire fighting if necessary.

Suitable extinguishing media : dry chemical, water spray, foam, carbon dioxide (CO₂)

Extinguishing media which must not be used for safety reasons : high volume water jet

Further information : Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear personal protective equipment. (see Chapter 8)

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Sweep up and shovel into suitable containers for disposal.

Additional advice : Never return spills in original containers for re-use.

7. HANDLING AND STORAGE

Handling

Safe handling advice : Wear personal protective equipment.

Storage

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.

Advice on common storage : Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.

Storage stability

Storage temperature : > 0 °C



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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.
- Hand protection : PVC or nitrile-rubber gloves
- Eye protection : safety glasses, or, goggles
- Skin and body protection : protective suit
- Hygiene measures : Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product. When using do not eat or drink.
- Protective measures : Avoid contact with skin, eyes and clothing. Keep working clothes separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Physical state : liquid
- Form : Suspo-emulsion (SE)
- Colour : yellow
- Odour : aromatic

Other data

- Boiling point/range : no data available
- Flash point : no data available
- Density : ca.1.05 g/cm³
at 20 °C
- Partition coefficient (n-octanol/water) : log POW = 4.83
at 20 °C

log POW = 4.9
(Diflufenican)
- Viscosity, dynamic : no data available

10. STABILITY AND REACTIVITY

- Thermal decomposition : No spontaneous or exothermic decomposition up to 100 °C.



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Conditions to avoid : No decomposition if stored and applied as directed.

Materials to avoid : oxidizing agents, strong acids and strong bases

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat
Dose: > 5,000 mg/kg
Test substance: (Trifluralin)

LD50 rat
Dose: > 2,000 mg/kg
Test substance: (Diflufenican)

Acute dermal toxicity : LD50 rabbit
Dose: > 5,000 mg/kg
Test substance: (Trifluralin)

LD50 rabbit
Dose: > 2,000 mg/kg
Test substance: (Diflufenican)

Acute inhalation toxicity : LC50
Exposure time: 4 h
Dose: > 4.8 mg/l
Test substance: (Trifluralin)

LC50
Exposure time: 4 h
Dose: > 2.34 mg/l
Test substance: (Diflufenican)

Skin irritation : Classification: Irritating to skin.

Eye irritation : Classification: Irritating to eyes.

Sensitization : Classification: May cause sensitisation by skin contact.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish : LC50
Dose: 0.088 mg/l
Testing period: 96 h
Test substance: (Trifluralin)

LC50
Dose: 56 - 100 mg/l
Testing period: 96 h
Test substance: (Diflufenican)



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Toxicity to daphnia : LC50
Dose: 0.245 mg/l
Testing period: 48 h
Test substance: (Trifluralin)

LC50
Dose: > 10 mg/l
Testing period: 48 h
Test substance: (Diflufenican)

Toxicity to algae : EC50
Dose: > 12.2 mg/l
Exposure time: 168 h
Test substance: (Trifluralin)

EC50
Dose: > 10 mg/l
Exposure time: 168 h
Test substance: (Diflufenican)

13. DISPOSAL CONSIDERATIONS

Product : Dispose of product and packaging in accordance with The Green Code. (The Code of Practice for the safe use of Pesticides on Farms and Holdings.) A MAFF Publication.

Contaminated packaging : Do not re-use empty containers. Dispose of as unused product.

According to European Directive 2000/532/EC as amended :
Waste Key Number : 02 01 08 (agrochemical waste containing dangerous substances)

14. TRANSPORT INFORMATION

UN-No : **UN3082**

Description of the goods : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.*(Trifluralin)

ADR/RID

Class : 9
Packaging group : III

IMDG

Class : 9
Packaging group : III
Marine pollutant : Y

IATA-DGR

Class : 9
Packaging group : III



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15. REGULATORY INFORMATION

labelling according to EEC	EEC/99/45	
Directive	:	
Symbol(s):	: Xi	Irritant
	: N	Dangerous for the environment
R-phrase(s)	: R36	Irritating to eyes.
	: R43	May cause sensitization by skin contact.
	: R66	Repeated exposure may cause skin dryness or cracking.
	: R67	Vapours may cause drowsiness and dizziness.
	: R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S35	This material and its container must be disposed of in a safe way.
	: S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	: S23	Do not breathe spray.
	: S37	Wear suitable gloves.
	: S25	Avoid contact with the eyes.
	: S51	Use only in well ventilated areas.
Other regulations	:	The product is classified and labelled in accordance with National and European directives.

16. OTHER INFORMATION

PRINT DATE : 22/05/2007
(Alterations are indicated in the left hand margin by: ||)

Full text of any R phrases referred to under heading 2:

- R36 - Irritating to eyes.
- R43 - May cause sensitization by skin contact.
- R50/53 - Very 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.
- R10 - Flammable.
- R20 - Harmful by inhalation.
- R36/37/38 - Irritating to eyes, respiratory system and skin.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R22 - Harmful if swallowed.
- R40 - Limited evidence of a carcinogenic effect.
- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R36 - Irritating to eyes.



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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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