



SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

Thor

Version 1 (UK)

Issue date 11/03/2009

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

Product information

Trade name : **Thor**

Usage : herbicide

Company : Nufarm UK Limited
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Wyke
Bradford
West Yorkshire BD12 9EJ
United Kingdom

Telephone : +44 (0)1274 691234
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Emergency telephone : **+44(0)1274 696603**

2. HAZARDS IDENTIFICATION

May cause sensitization by skin contact.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Water dispersible granule
Tribenuron-methyl 500 g/kg

Components	CAS-No.	EINECS-No. ELINCS-No.	Symbol(s)	R-phrases(s)	Concentration (w/w)
Tribenuron methyl	101200-48-0	401-190-1	Xi	R43	50.0 %
Tribasic Sodium Phosphate Dodecahydrate 100 unlisted	10101-89-0		Xi	R36/38	10% - 20%
sodium carbonate	497-19-8	207-838-8	Xi	R36	1% - 10%
Lignin, Alkali, Reaction Products With Disodium Sulfite And Formaldehyde	105859-97-0		Xi	R36	1% - 10%

4. FIRST AID MEASURES

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

Skin contact : Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before



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- re-use.
- Inhalation : Move to fresh air. Artificial respiration and/or oxygen may be necessary. Consult a physician after significant exposure.
- Ingestion : Do not induce vomiting without medical advice. Obtain medical attention. If conscious, drink plenty of water.

Notes to physician

- Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- Specific hazards during fire fighting : In the event of fire (NO_x,CO_x,SO₂) may be formed.
- Special protective equipment for fire-fighters : Wear self contained breathing apparatus for fire fighting if necessary.
- Suitable extinguishing media : Water spray, Dry chemical, Carbon dioxide (CO₂)
- Extinguishing media which shall 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. Do not allow material to contaminate ground water system.
- Methods for cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal. If spill area is on ground near valuable plants or trees, remove 5 cm of top soil after initial clean-up.
- Additional advice : Never return spills in original containers for re-use.

7. HANDLING AND STORAGE

Handling

- Safe handling advice : Provide for appropriate exhaust ventilation and dust collection at machinery. Do not breathe vapours or spray mist. Wear



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personal protective equipment.

Storage

Requirements for storage areas and containers : Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep out of reach of children.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	occupational exposure limits	Note
Tribenuron methyl	101200-48-0		
Tribasic Sodium Phosphate Dodecahydrate 100 unlisted	10101-89-0		
sodium carbonate	497-19-8		
Lignin, Alkali, Reaction Products With Disodium Sulfite And Formaldehyde	105859-97-0		

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection : PVC or nitrile-rubber gloves

Eye protection : Goggles, or, Safety glasses

Skin and body protection : Protective suit

Hygiene measures : When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Avoid contact with the skin and the eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : solid granular
Colour : light brown
Odour : mild



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Other data

Flash point : not applicable

Bulk density : 571 kg/m³

Water solubility : completely soluble

pH : 8.9
at 10 g/l (20 °C)

10. STABILITY AND REACTIVITY

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

Materials to avoid : none

Type of listing : Hazardous decomposition products

Hazardous decomposition products : Sulphur oxides, Carbon oxides, nitrogen oxides (NO_x)

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat
Dose: > 5,000 mg/kg

Acute dermal toxicity : LD50 rat
Dose: > 5,000 mg/kg

Acute inhalation toxicity : LC50 rat
Exposure time: 4 h
Dose: > 6 mg/l
Test substance: (tribenuron-methyl)

Skin irritation : rabbit
Result: No skin irritation

Eye irritation : rabbit
Result: No eye irritation

Sensitisation : Maximisation Test Guinea-pig
Result: May cause sensitization by skin contact.



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Evaluation mutagenicity : Did not show mutagenic effects in animal experiments.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish : static test LC50 *Oncorhynchus mykiss* (Rainbow trout)
Dose: > 120 mg/l
Testing period: 96 h

Toxicity to daphnia : EC50 *Daphnia*
Dose: > 120 mg/l
Testing period: 48 h

Toxicity to algae : EbC50 Toxicity to algae
Dose: 0.0162 mg/l
Exposure time: 72 h

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-Number : **3077**

Description of the goods : UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*(tribenuron-methyl)

ADR/RID



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Class : 9
Packaging group : III

IMDG

Class : 9
Packaging group : III

15. REGULATORY INFORMATION

Symbol(s) : Xn Harmful
N Dangerous for the environment

R-phrase(s) : R43 May cause sensitization by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s) : S36 Wear suitable protective clothing.
S37 Wear suitable gloves.
S57 Use appropriate container to avoid environmental contamination.
S35 This material and its container must be disposed of in a safe way.

16. OTHER INFORMATION

Print Date : 03/11/2009

(Alterations are indicated in the left hand margin by: ||)

Full text of any R phrases referred to under heading 3:
R43 - May cause sensitization by skin contact.
R36/38 - Irritating to eyes and skin.
R36 - Irritating to eyes.
R36 - Irritating to eyes.



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