



SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

Tandus

Version 2 (UK)

Issue date 11/03/2009

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

Product information

Trade name : **Tandus**

Usage : herbicide

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

Telephone : +44 (0)1274 691234
Telefax : +44 (0)1274 691176
E-mail : infouk@uk.nufarm.com

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

2. HAZARDS IDENTIFICATION

May cause sensitization by skin contact
Toxic to aquatic organisms.
May cause long-term adverse effects in the environment.
Harmful: may cause lung damage if swallowed.
Vapours may cause drowsiness and dizziness.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Emulsifiable concentrate
contains 200g/l Fluroxypyr.

Components	CAS-No.	EINECS-No. ELINCS-No.	Symbol(s)	R-phrases(s)	Concentration (w/w)
Fluroxypyr-meptyl	81406-37-3	279-752-9	N	R50/53	28.24 %
Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified	64742-94-5	265-198-5	Xn, N	R51/53, R65, R66, R67	22.84 %

4. FIRST AID MEASURES

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. If symptoms persist, call a physician. Wash contaminated clothing before re-use.

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



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Ingestion : Do NOT induce vomiting. Rinse mouth. If conscious, drink plenty of water. If symptoms persist, call a physician.

Notes to physician

Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- Specific hazards during fire fighting : In the event of fire (HCl, Cl₂, NO_x, CO_x, HF) may be formed.
- Special protective equipment for fire-fighters : Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.
- Suitable extinguishing media : Water spray, Carbon dioxide (CO₂), Dry powder, Alcohol-resistant foam
- 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.
- 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 : Store in original container. Keep containers tightly closed in a cool, well-ventilated place.
- Advice on common storage : Keep out of reach of children. Keep away from food, drink and



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animal feeding stuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

- Respiratory protection : No special protective equipment required.
- Hand protection : PVC or nitrile-rubber gloves
- Eye protection : Safety glasses, or, Goggles
- Skin and body protection : lightweight protective clothing
- 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, drink or smoke.
- Protective measures : Avoid contact with skin, eyes and clothing. Keep working clothes separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Physical state : liquid
- Colour : light brown
- Odour : solvent

Other data

- Flash point : 68 °C
- Density : 1.02 g/cm³
at 20 °C
- Water solubility : emulsifiable
- pH : 3.8
- Partition coefficient: n-
octanol/water : log POW = 4.5
(pH 5), (Fluroxypyr-meptyl)
- Viscosity, dynamic : 15.8 mPa.s



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at 20 °C

Viscosity, kinematic : 15.5 mm²/s
at 20 °C

Surface tension : > 33 mN/m
at 25 °C

10. STABILITY AND REACTIVITY

Thermal decomposition : No decomposition if stored and applied as directed.

Conditions to avoid : No dangerous reaction known under conditions of normal use.

Materials to avoid : Strong bases

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat
Dose: > 2,500 mg/kg

Acute dermal toxicity : LD50 rat
Dose: > 2,000 mg/kg

Acute inhalation toxicity : LC50 rat
Dose: > 1 mg/l
Remarks: highest attainable concentration
Test substance: (Fluroxypyr-meptyl)

Skin irritation : rabbit
Result: No skin irritation

Eye irritation : rabbit
Result: No eye irritation

Sensitisation : mouse
Result: Causes sensitization.



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12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish : LC50
Dose: 16.7 mg/l
Testing period: 96 h

Toxicity to daphnia : EC50
Dose: 29.2 mg/l
Testing period: 48 h

Toxicity to algae : EC50
Dose: 3.65 mg/l
Exposure time: 72 h

EC50 Lemna gibba (Duckweed)
Dose: > 100 mg/l
Exposure time: 168 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 dispose with household waste. Do not re-use empty containers. Dispose at licensed waste disposal site capable of accepting pesticides in compliance with applicable regulations. according to EC directive 94/62/EC

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 : **3082**

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



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ADR/RID

Class : 9
Packaging group : III

IMDG

Class : 9
Packaging group : III

IATA-DGR

Class : 9
Packaging group : III

15. REGULATORY INFORMATION

Labelling according to EC

Directives : EEC/99/45

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

R-phrase(s) : R43 May cause sensitization by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.

S-phrase(s) : S23 Do not breathe fumes.
S24 Avoid contact with skin.
S35 This material and its container must be disposed of in a safe way.
S37 Wear suitable gloves.
S57 Use appropriate container to avoid environmental contamination.
S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.



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Further information : Caution - substance not yet tested completely.

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:

- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 - Harmful: may cause lung damage if swallowed.
- R66 - Repeated exposure may cause skin dryness or cracking.
- R67 - Vapours may cause drowsiness and dizziness.

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