



# SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

## Nufosate Ace

Version 4 (UK)

Issue date 02/18/2010

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### Product information

Trade name : **Nufosate Ace**

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

Risk of serious damage to eyes.  
Toxic to aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : Aqueous solution of the isopropylammonium salt  
Glyphosate 360g/L

Components	CAS-No.	EINECS-No. ELINCS-No.	Symbol(s)	R-phrases(s)	Concentration (w/w)
Glyphosate IPA salt	38641-94-0	254-056-8		n.c.	41.5 %
Tallowalkylamineethoxylate	61791-26-2	500-153-8	Xn, N	R22, R41, R51/53	8.1% - 13.5%

### 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 with soap and water. If symptoms persist, call a physician. Wash contaminated clothing before re-use.

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

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



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### Notes to physician

Treatment : Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

- Specific hazards during fire fighting : In the event of fire (NO<sub>x</sub>, CO<sub>x</sub>, P<sub>2</sub>O<sub>5</sub>) 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, Dry powder, Sand, Foam, Carbon dioxide (CO<sub>2</sub>)
- 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 : Use 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). Shovel into suitable container for disposal.
- Additional advice : Never return spills in original containers for re-use.

## 7. HANDLING AND STORAGE

### Handling

Safe handling advice : Keep out of reach of children. Wear personal protective equipment.

### Storage

Requirements for storage areas and containers : Store in original container.

Advice on common storage : Keep away from food, drink and 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 : Tightly fitting safety goggles
- Skin and body protection : Long sleeved clothing
- Hygiene measures : Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Remove and wash contaminated clothing and gloves, including the inside, before re-use.
- Protective measures : Avoid contact with skin, eyes and clothing. Keep working clothes separately.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

- Physical state : liquid
- Form : aqueous solution
- Colour : light brown
- Odour : amine-like

### Other data

- Melting point/range : -10 °C
- Boiling point/boiling range : > 100 °C
- Flash point : does not flash
- Ignition temperature : no data available
- Upper explosion limit : no data available
- Lower explosion limit : no data available
- Vapour pressure : Active ingredient as salt in aqueous solution. Vapour pressure



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is negligibly low.

Density	:	1.17 g/cm <sup>3</sup> at 20 °C
Water solubility	:	completely miscible
pH	:	ca.4.6 at 20.6 g/l
Partition coefficient: n- octanol/water	:	log POW = < -3.2 at 20 °C  (Glyphosate), (pH 5)
Viscosity, dynamic	:	no data available

## 10. STABILITY AND REACTIVITY

Thermal decomposition	:	No spontaneous or exothermic decomposition up to 100 °C.
Conditions to avoid	:	No dangerous reaction known under conditions of normal use.
Materials to avoid	:	Strong bases
Hazardous reactions	:	No decomposition if stored and applied as directed.

## 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50 rat Dose: > 2,000 mg/kg
Acute dermal toxicity	:	LD50 rat Dose: > 4,000 mg/kg
Acute inhalation toxicity	:	LC50 rat Exposure time: 4 h Dose: 3.18 mg/l
Skin irritation	:	rabbit Result: No skin irritation



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Eye irritation : rabbit  
Result: Eye irritation

Sensitisation : Guinea-pig  
Result: Did not cause sensitization on laboratory animals.

Further information : No persistent or cumulative effects were observed.

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

Stability in soil : DT50 : ca. 4 d  
DT90 : < 20 d  
(Glyphosate)

Bioaccumulation : No bioaccumulation.

### Ecotoxicity effects

Toxicity to bees : Not toxic to bees.

Toxicity to earthworms : LD50 *Eisenia foetida*  
Dose: > 5,000 mg/kg  
Testing period: 14 d

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout)  
Dose: 7.5 mg/l  
Testing period: 96 h

Toxicity to daphnia : EC50 *Daphnia*  
Dose: 8.5 mg/l  
Testing period: 48 h

Toxicity to algae : EC50 *Desmodesmus subspicatus* (green algae)  
Dose: 16 mg/l  
Exposure time: 72 h



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### 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 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.\*(Glyphosate, Tallow alkylamine ethoxylate)

**ADR/RID**

- Class : 9  
Packaging group : III

**IATA-DGR**

- Class : 9  
Packaging group : III

**IMDG :**

IMDG - Not Applicable, shipped under SP 909

### 15. REGULATORY INFORMATION

- Symbol(s) : Xi Irritant



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	N	Dangerous for the environment
R-phrase(s)	: R41 R51/53	Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S26  S46  S35  S57	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, seek medical advice immediately and show this container or label. This material and its container must be disposed of in a safe way. Use appropriate container to avoid environmental contamination.

### 16. OTHER INFORMATION

Print Date : 18/02/2010

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

Full text of any R phrases referred to under heading 3:

- n.c. - This chemical substance is not classified in the Annex VI of Regulation (EC) No 1272/2008.
- R22 - Harmful if swallowed.
- R41 - Risk of serious damage to eyes.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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