



# SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

**Lotus**

Version 1 (UK)

Issue date 11/02/2009

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

### Product information

Trade name : **Lotus**

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

Irritating to skin.  
Risk of serious damage to eyes.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : Mixture of active ingredient and additives  
Cinidon-ethyl 200 g/l

Components	CAS-No.	EINECS-No. ELINCS-No.	Symbol(s)	R-phrased(s)	Concentration (w/w)
Cinidon-ethyl	142891-20-1		Xi, N	R43, R50/53	19.1 %
Solvent naphtha (petroleum), heavy arom.; Kerosine - unspecified	64742-94-5	265-198-5	Xn	R65	68.6% - 72.2%
Calciumdodecylbenzolsulfon at in 2-Ethylhexanol			Xi	R38, R41	3.4% - 4.2%

## 4. FIRST AID MEASURES

General advice : Avoid contact with skin, eyes and clothing. Take off all contaminated clothing immediately. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact : Wash off with warm water and soap. If skin irritation persists,



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- Inhalation : call a physician.  
: Move to fresh air. Obtain medical attention.
- Ingestion : Clean mouth with water and drink afterwards plenty of water.  
: Prevent vomiting if possible. Obtain medical attention.

**Notes to physician**

- Treatment : Treat according to symptoms (decontamination, vital functions). No specific antidote, symptomatic treatment.

**5. FIRE-FIGHTING MEASURES**

- Specific hazards during fire fighting : In the event of fire (NO<sub>x</sub>,CO<sub>x</sub>,SO<sub>2</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, Carbon dioxide (CO<sub>2</sub>), 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.
- Advice on protection : Keep away from heat and sources of ignition.



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against fire and explosion

**Storage**

Requirements for storage areas and containers : Store at room temperature in the original container. Avoid exposition to sunlight.

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

**Storage stability**

Storage temperature : < 40 °C  
: > -5 °C

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Personal protective equipment**

Respiratory protection : Breathing apparatus needed only when aerosol or mist is formed. Gasfilter Type A for gases/vapours of organic compounds (boiling point >65 °C)

Hand protection : PVC or nitrile-rubber gloves

Eye protection : Tightly fitting safety goggles

Skin and body protection : Protective suit

Hygiene measures : Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands and face 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  
Form : Emulsifiable concentrate  
Colour : yellow  
Odour : aromatic

**Other data**

Solidification point : ca.-5 °C



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Flash point : 100 °C

Ignition temperature : 460 °C

Density : 1.05 g/cm<sup>3</sup>  
at 20 °C

Water solubility : emulsifiable

pH : no data available

Viscosity, dynamic : ca.15.1 mPa.s  
at 20 °C

## 10. STABILITY AND REACTIVITY

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

Materials to avoid : Strong acids and strong bases

## 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat  
Dose: ca. 3,000 mg/kg

Acute dermal toxicity : LD50 rat  
Dose: > 4,000 mg/kg

Acute inhalation toxicity : LC50 rat  
Exposure time: 4 h  
Dose: > 5.8 mg/l

Skin irritation : rabbit  
Result: irritating

Eye irritation : rabbit  
Result: Risk of serious damage to eyes.

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



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Further information : Misuse may cause damage to health.

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

Biodegradability : Result: Not easily biodegradable (by OECD criteria).

Additional information : Do not flush into surface water or sanitary sewer system.

### Ecotoxicity effects

Toxicity to fish : LC50 *Oncorhynchus mykiss* (Rainbow trout)  
Dose: 5 mg/l  
Testing period: 96 h

Toxicity to daphnia : EC50 *Daphnia magna* (Water flea)  
Dose: 4.72 mg/l  
Testing period: 48 h

Toxicity to algae : EC50 *Pseudokirchneriella subcapitata*  
Dose: < 1 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 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.\*(Solvent Naphtha, Cinidon-Ethyl)

### ADR/RID

Class : 9

Packaging group : III

### IMDG

Class : 9

Packaging group : III

Marine pollutant : Y

### IATA-DGR

Class : 9

Packaging group : III

## 15. REGULATORY INFORMATION

Symbol(s) : N Dangerous for the environment  
Xi Irritant

R-phrase(s) : R38 Irritating to skin.  
R41 Risk of serious damage to eyes.  
R50/53 Very toxic to aquatic organisms, may cause  
long-term adverse effects in the aquatic  
environment.

S-phrase(s) : S26 In case of contact with eyes, rinse  
immediately with plenty of water and seek  
medical advice.  
S39 Wear eye/face protection.  
S35 This material and its container must be  
disposed of in a safe way.  
S57 Use appropriate container to avoid  
environmental contamination.



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Further information : Handle in accordance with good industrial hygiene and safety practice.

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws.

## 16. OTHER INFORMATION

Print Date : 02/11/2009

(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.
- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R65 - Harmful: may cause lung damage if swallowed.
- R38 - Irritating to skin.
- R41 - Risk of serious damage to eyes.

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