



SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

Larke

Version 2 (UK)

Issue date 11/16/2010

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

Product information

Trade name : **Larke**

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

2. HAZARDS IDENTIFICATION

Harmful if swallowed.
Risk of serious damage to eyes.
Irritating to respiratory system.
Very 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 dimethylammonium salt
Contains 750g/l MCPA

Components	CAS-No.	EINECS-No. ELINCS-No.	Symbol(s)	R-phrases(s)	Concentration (w/w)
MCPA	94-74-6	202-360-6	Xn	R22, R38, R41	63.56 %
4-chloro-o-cresol	1570-64-5	216-381-3	T, C, N	R23, R35, R50	0.5 %

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 : 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) 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



animal feeding stuffs.

Storage stability

Storage temperature : > 0 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

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, 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 : brown
- Odour : amine-like

Other data

- Boiling point/boiling range : 100 °C
- Flash point : > 100 °C
- Density : ca.1.18 g/cm³
at 20 °C
- pH : 6.3



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Partition coefficient: n-
octanol/water : log POW = -0.81
(pH 7), (MCPA)

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 acids and strong bases

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat
Dose: 1,000 mg/kg

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

Acute inhalation toxicity : LC50 rat
Exposure time: 4 h
Dose: > 4.72 mg/l

Skin irritation : Result: No skin irritation

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

Sensitisation : Buehler Test
Result: Did not cause sensitization on laboratory animals.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to bees : LD50
Value ($\mu\text{g}/\text{Species}$): > 200

Toxicity to fish : LC50



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Dose: 44 mg/l
Testing period: 96 h
Test substance: (MCPA)

Toxicity to daphnia : EC50
Dose: 190 mg/l
Testing period: 48 h
Test substance: (MCPA)

Toxicity to algae : EC50
Dose: 26.9 mg/l
Exposure time: 120 h
Test substance: (MCPA)

13. DISPOSAL CONSIDERATIONS

Product : In accordance with local and national regulations.

Contaminated packaging : Do not re-use empty containers. Dispose empty and triple rinsed container within a local disposing system 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 :

ADR/RID :

Not a dangerous substance as defined in the above regulations.

IMDG :

Not a dangerous substance as defined in the above regulations.

IATA-DGR :

Not a dangerous substance as defined in the above regulations.



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15. REGULATORY INFORMATION

Symbol(s)	: Xn N	Harmful Dangerous for the environment
R-phrase(s)	: R22 R37 R41 R50/53	Harmful if swallowed. Irritating to respiratory system. Risk of serious damage to eyes. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S26 S39 S35 S57 SP 1	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection. This material and its container must be disposed of in a safe way. Use appropriate container to avoid environmental contamination. Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).
Other regulations	: The product is classified and labelled in accordance with EC directives or respective national laws.	

16. OTHER INFORMATION

Print Date : 16/11/2010

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

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

- R22 - Harmful if swallowed.
- R38 - Irritating to skin.
- R41 - Risk of serious damage to eyes.
- R23 - Toxic by inhalation.
- R35 - Causes severe burns.
- R50 - Very toxic to aquatic organisms.



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The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.