



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Lupo

Version 1 (Ireland)

Issuing date: 2014/01/07

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

1.1. Product identifier

Trade name : **Lupo**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Herbicide

1.3. Details of the supplier of the safety data sheet

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 address: infouk@uk.nufarm.com

1.4. Emergency telephone number

+44 (0)1274 696603

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

EEC/99/45 :	Xi	R41 - Risk of serious damage to eyes. R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
EG_1272/08 :	EyeDam.1 AquaticChronic3	H318 - Causes serious eye damage. H412 - Harmful to aquatic life with long lasting effects.

2.2. Label elements

according directive 1999/45/EG

Pictogram:



Xi

- R41 - Risk of serious damage to eyes.
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S 2 - Keep out of the reach of children.
S13 - Keep away from food, drink and animal feedingstuffs.
S25 - Avoid contact with eyes.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 - Wear suitable gloves and eye/face protection.
S57 - Use appropriate container to avoid environmental contamination.
S35 - This material and its container must be disposed of in a safe way.

REGULATION (EC) No 1272/2008

Pictogram:



GHS05

Signal word: Danger

- H318 - Causes serious eye damage.
H412 - Harmful to aquatic life with long lasting effects.
- P280 - Wear eye protection/ face protection.
P273 - Avoid release to the environment.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/ physician.
P501 - Dispose of contents/ container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non hazardous waste.

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Aqueous solution of dimethylammonium salts
Contains 2,4-D / MCPA DMA (345/345 g acid/l)

3.2. Mixtures

Components:

MCPA

CAS-No.: 94-74-6
EINECS-No. / ELINCS No.: 202-360-6
REACH No.:
Concentration: 28.77 % (w/w)

Classification:

EG_1272/08 : AcuteTox.4 H302 - Harmful if swallowed.
SkinIrrit.2 H315 - Causes skin irritation.
EyeDam.1 H318 - Causes serious eye damage.
AquaticAcute1 H400 - Very toxic to aquatic life.
AquaticChronic1 H410 - Very toxic to aquatic life with long lasting effects.
EEC/67/548 : Xn R22 - Harmful if swallowed.
Xi R38 - Irritating to skin.
Xi R41 - Risk of serious damage to eyes.
N R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2,4-D

CAS-No.: 94-75-7
EINECS-No. / ELINCS No.: 202-361-1
REACH No.:
Concentration: 28.77 % (w/w)

Classification:

EG_1272/08 : AcuteTox.4 H302 - Harmful if swallowed.
STOT_SE3 H335 - May cause respiratory irritation.
EyeDam.1 H318 - Causes serious eye damage.
SkinSens.1 H317 - May cause an allergic skin reaction.
AquaticChronic3 H412 - Harmful to aquatic life with long lasting effects.
EEC/67/548 : Xn R22 - Harmful if swallowed.
Xi R37 - Irritating to respiratory system.
Xi R41 - Risk of serious damage to eyes.
R43 - May cause sensitization by skin contact.
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

dimethylamine

CAS-No.: 124-40-3
EINECS-No. / ELINCS No.: 204-697-4
REACH No.: 01-2119475495-27
Concentration: 21.17 % (w/w)

Classification:

EG_1272/08 : Flam.Gas1 H220 - Extremely flammable gas.
AcuteTox.4 H332 - Harmful if inhaled.
STOT_SE3 H335 - May cause respiratory irritation.
SkinIrrit.2 H315 - Causes skin irritation.
EyeDam.1 H318 - Causes serious eye damage.



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EEC/67/548 :	Press.Gas	---
	F+	R12 - Extremely flammable.
	Xn	R20 - Harmful by inhalation.
	Xi	R37/38 - Irritating to respiratory system and skin.
	Xi	R41 - Risk of serious damage to eyes.

4. FIRST AID MEASURES

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

4.2. Most important symptoms and effects, both acute and delayed

Hazards : No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media	:	Water spray, Carbon dioxide (CO ₂), Dry powder, Alcohol-resistant foam
Extinguishing media which shall not be used for safety reasons	:	High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : In the event of fire (HCl, Cl₂, CO) may be formed.



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5.3. Advice for firefighters

- Special protective equipment for firefighters : Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.
- Further Information : Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. (see Chapter 8)

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

- 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.

6.4. Reference to other sections

see Chapter 13

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

- Safe handling advice : Wear personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

- 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.

7.3. Specific end use(s)



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none

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters
(according to S.I. No. 619 of 2001)

Components	CAS-No.	National occupational exposure limits	Note
MCPA	94-74-6		no classification available, (according to S.I. No. 619 of 2001)
2,4-D	94-75-7	10 mg/m ³	(according to S.I. No. 619 of 2001)
dimethylamine	124-40-3	3.8 mg/m ³	(according to S.I. No. 619 of 2001)

8.2. Exposure controls

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 : Protective suit
- 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

9.1. Information on basic physical and chemical properties

Appearance

- Physical state : liquid at 20 °C ,
- Form : Soluble concentrate
- Colour : brown
- Odour : amine-like



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Melting point/range	: ca.0 °C
Boiling point/boiling range	: ca.100 °C at 1,013 hPa
Flash point	: > 106 °C
Vapour pressure	: Active ingredient is an organic salt. Vapour pressure is negligibly low.
Density	: 1.199 g/cm ³ at 20 °C
pH	: 6

9.2. Other information

none

10. STABILITY AND REACTIVITY

10.1. Reactivity

no data available, not applicable

10.2. Chemical stability

No spontaneous or exothermic decomposition up to 100 °C.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

none

10.5. Incompatible materials to avoid

Strong bases

10.6. Hazardous decomposition products

none



11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

- Acute oral toxicity : LD50 rat
Dose: 2,500 mg/kg
- Acute dermal toxicity : LD50 rat
Dose: > 2,000 mg/kg
- Skin irritation : rabbit
Result: No skin irritation
- Eye irritation : rabbit
Result: Severe eye irritation
Remarks: Risk of serious damage to eyes.
- Sensitisation : Guinea-pig
Result: Did not cause sensitization on laboratory animals.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

- Toxicity to birds : Practically non toxic.
- Toxicity to bees : Not toxic to bees.
- Toxicity to fish : LC50 Toxicity to fish
Dose: > 357 mg/l
Testing period: 96 h
- Toxicity to daphnia : EC50 Daphnia magna (Water flea)
Dose: > 342 mg/l
Testing period: 48 h
- Toxicity to algae : EC50 Toxicity to algae
Dose: > 350 mg/l



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Exposure time: 72 h

12.2. Persistence and degradability

Biodegradability : Readily biodegradable, according to appropriate OECD test.

Stability in soil : DT50: 7 - 14 d
(MCPA)

DT50: 2 - 59 d
(2,4-D)

Stability in water : DT50: 13 d
(2,4-D)

DT50: 25 d
(MCPA)

12.3. Potential bioaccumulation

Bioaccumulation : Does not bioaccumulate.

12.4. Mobility in soil

Koc= 5 - 212 (2,4-D)

Koc = 10 - 157 (MCPA)

12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6. Other adverse effects

none

13. DISPOSAL CONSIDERATIONS

According to European Directive 2000/532/EC as amended :

Waste Code : 02 01 08 (agrochemical waste containing dangerous substances)

13.1. Waste treatment methods

Product : Dispose of in accordance with local regulations.



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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

14. TRANSPORT INFORMATION

14.1. UN number

14.2. Proper shipping name

not applicable

14.3. Transport hazard class(es)

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.

14.4. Packaging group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

none

15. REGULATORY INFORMATION



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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

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

15.2. Chemical Safety Assessment

none

16. OTHER INFORMATION

Print Date : 2014/01/07

The date format YYYY/MM/DD is used according to ISO 8601.
(Alterations are indicated in the left hand margin by: ||)

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