



SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

2,4-D / MCPA DMA SL (345/345 g acid/l)

Version 6 (Austria)

Issue date 10.11.2008

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

Product information

Trade name : **2,4-D / MCPA DMA SL (345/345 g acid/l)**

Usage : Pesticide

Company : Nufarm GmbH & Co KG
St.-Peter-Str. 25
A-4021 Linz
AUSTRIA
E-mail: Johann.Mayr@at.nufarm.com

Emergency telephone number : +43/732/6914-2466 (Linz/Austria production site)

2. HAZARDS IDENTIFICATION

Harmful if swallowed.
Irritating to skin.
Risk of serious damage to eyes.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Aqueous solution of dimethylammonium salts
2,4-D 345g/l, MCPA 345g/l

Components	CAS-No.	EINECS-No. ELINCS-No.	Symbol(s):	R-phrases(s)	Concentration (w/w)
MCPA DMA	2039-46-5	218-014-2	Xn	R20/21/22	35,2 %
2,4-D DMA	2008-39-1	217-915-8	Xn, N	R22, R41, R43, R51/53	34,6 %
2,4-Dichlorophenol	120-83-2	204-429-6	T, N	R22, R24, R34, R51/53	0% - 0,1%
4-chloro-o-cresol	1570-64-5	216-381-3	T, C, N	R23, R35, R50	0% - 0,1%

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 : Wash off immediately with soap and plenty of water.

Inhalation : Move to fresh air.

Ingestion : Rinse mouth. Do not induce vomiting. If swallowed, seek medical advice immediately and show this container or label.



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Notes to physician

- Symptoms : sweating, headache, weakness, diarrhoea, anorexia, nausea, salivation, stomach pains, blurred vision, muscle twitching, convulsions, loss of reflex, heart and circulatory collaps, coma
- Treatment : No specific antidote, symptomatic treatment. As the elimination occurs via the kidneys a dialyse is appropriate. Control of water and electrolytes balance. If ingested, gastric lavage.

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, dry powder, sand, foam, carbon dioxide (CO₂)
- Extinguishing media which must 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). Use mechanical handling equipment.
- 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



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

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

German storage class : 12/10 (Non Combustible Liquids, Packaging possibly combustible)

Storage stability

Storage temperature : > 0 °C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters
(according Austrian occupational exposure limits)

Components	CAS-No.	occupational exposure limits	Note
MCPA DMA	2039-46-5		no classification available
2,4-D DMA	2008-39-1	1 mg/m ³	total dust
2,4-Dichlorophenol	120-83-2	10 mg/m ³	
4-chloro-o-cresol	1570-64-5		no classification available

Personal protective equipment

Respiratory protection : No special protective equipment required.

Hand protection : gloves

Eye protection : safety glasses

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

Appearance

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



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Other data

Melting point/range	: ca.0 °C
Boiling point/range	: ca.100 °C at 1.013 hPa
Flash point	: > 100 °C
Ignition temperature	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: Active ingredient is an organic salt. Vapour pressure is negligibly low.
Density	: 1,2 g/cm ³ at 20 °C
pH	: ca.9
Partition coefficient (n-octanol/water)	: no data available
Viscosity, dynamic	: no data available

10. STABILITY AND REACTIVITY

Thermal decomposition	: No spontaneous or exothermic decomposition up to 100 °C.
Conditions to avoid	: none
Materials to avoid	: strong bases

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 rat Dose: ca. 1.500 mg/kg
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Acute dermal toxicity	:	LD50 rat Dose: > 2.000 mg/kg
Skin irritation	:	rabbit Result: Skin irritation
Eye irritation	:	rabbit Result: Severe eye irritation Remarks: Risk of serious damage to eyes.
Sensitization	:	Guinea-pig Result: Did not cause sensitization on laboratory animals.
Further information	:	Liquid causes strong irritation to the mucous membrane and severe damage to the cornea.

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradability : Readily biodegradable, according to appropriate OECD test.

Stability in soil : DT50 : ca. 20 d
(MCPA)

DT50 : 8 - 25 d
(2,4-D)

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

DT50 : 25 d
(MCPA)

Bioaccumulation : No bioaccumulation.

Ecotoxicity effects

Toxicity to birds : Practically non toxic.

Toxicity to bees : Not toxic to bees.

Toxicity to fish : LC50 Toxicity to fish
Dose: > 357 mg/l



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Toxicity to daphnia : EC50 Daphnia
Dose: > 342 mg/l

Toxicity to algae : EC50
Dose: > 350 mg/l

Further information : According to our experience, doesn't cause any disturbance in waste water clarifying plant if used appropriately.

Environmental damage is not known or expected under normal use.

13. DISPOSAL CONSIDERATIONS

Product : In accordance with local and national regulations.

Do not dispose with household waste.

Dispose at an approved waste disposal facility. Dispose the product and its packages as dangerous waste.

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 Austrian standard ÖNORM S2100 :

Waste Key Number : 53103

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

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

14. TRANSPORT INFORMATION

UN-No : 3082



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Description of the goods : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.*(2,4-D)

ADR/RID

Class : 9
Packaging group : III

IMDG

Class : 9
Packaging group : III
Marine pollutant : MP

IATA-DGR

Class : 9
Packaging group : III

15. REGULATORY INFORMATION

Symbol(s) : Xn Harmful

R-phrase(s) : R22 Harmful if swallowed.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.

S-phrase(s) : S 2 Keep out of reach of children.
S13 Keep away from food, drink and animal
feeding stuffs.
S20/21 When using, do not eat, drink or smoke.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse
immediately with plenty of water and seek
medical advice.
S36/37/39 Wear suitable protective clothing, gloves and
eye/face protection.
S46 If swallowed, seek medical advice
immediately and show this container or
label.

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



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practice.

Other regulations : The product is classified and labelled in accordance with National and European directives.

16. OTHER INFORMATION

PRINT DATE : 05.12.2008

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

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

- R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
- R22 - Harmful if swallowed.
- R41 - Risk of serious damage to eyes.
- R43 - May cause sensitization by skin contact.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R22 - Harmful if swallowed.
- R24 - Toxic in contact with skin.
- R34 - Causes burns.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R23 - Toxic by inhalation.
- R35 - Causes severe burns.
- R50 - Very toxic to aquatic organisms.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Contact person

COMPANY : Nufarm GmbH & Co KG
St.-Peter-Str. 25
A-4021 Linz
AUSTRIA
Dr. E. Gibert
Ing. J. Mayr

Telephone : +43/732/6918-2313 +43/732/6918-4010
Telefax : +43/732/6918-62313 +43/732/6918-64010
E-mail : Eric.Gibert@at.nufarm.com Johann.Mayr@at.nufarm.com

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