



**SAFETY DATA SHEET**  
according to Regulation (EC) No. 1907/2006

**PastureMaster**

Version 1 (UK)

Issuing date: 2017/04/05

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

### 1.1. Product identifier

Trade name : **PastureMaster**

### 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

EG\_1272/08 : EyeDam.1 H318 - Causes serious eye damage.

### 2.2. Label elements

REGULATION (EC) No 1272/2008

Pictogram:



GHS05

Signal word: Danger

- H318 - Causes serious eye damage.  
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.  
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.
- SP 1 - 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).

### 2.3. Other hazards

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : Aqueous solution of dimethylammonium salts  
360g 2,4-D/L + 315g MCPA/L

### 3.2. Mixtures

**Components:**

2,4-D DMA  
CAS-No.: 2008-39-1  
EINECS-No. / ELINCS No.: 217-915-8  
REACH No.:  
Concentration: 35.27 % (w/w)

Classification:



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EG\_1272/08 : AcuteTox.4 H302 - Harmful if swallowed.  
EyeDam.1 H318 - Causes serious eye damage.  
SkinSens.1 H317 - May cause an allergic skin reaction.  
AquaticChronic2 H411 - Toxic to aquatic life with long lasting effects.

**MCPA DMA**

CAS-No.: 2039-46-5  
EINECS-No. / ELINCS No.: 218-014-2  
REACH No.:  
Concentration: 30.74 % (w/w)

**Classification:**

EG\_1272/08 : AcuteTox.4 H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled  
AquaticAcute1 H400 - Very toxic to aquatic life.  
AquaticChronic1 H410 - Very toxic to aquatic life with long lasting effects.

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

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

Symptoms : 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, Dry powder, Sand, Foam, Carbon dioxide (CO<sub>2</sub>)



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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, Cl<sub>2</sub>, NO<sub>x</sub>, CO) may be formed.

### 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

Use 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). Use mechanical handling equipment.

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. Keep out of the reach of children.



## 7.2. Conditions for safe storage, including any incompatibilities

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.

### Storage stability

Storage temperature : > 0 °C

## 7.3. Specific end use(s)

none

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Components with workplace control parameters  
(EH40/2005 Workplace exposure limits)

Components	CAS-No.	National occupational exposure limits	Note
2,4-D DMA	2008-39-1	10 mg/m <sup>3</sup>	Long-term exposure limit
MCPA DMA	2039-46-5		no classification available

### 8.2. Exposure controls

#### Personal protective equipment

Hand protection : PVC or nitrile-rubber gloves

## 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 : yellowish  
Odour : slight amine-like

Melting point/range : no data available

Boiling point/boiling range : no data available



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Flash point	:	> 200 °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	:	1.192 g/cm <sup>3</sup> at 20 °C
Water solubility	:	completely miscible
pH	:	8.6
Partition coefficient: n-octanol/water	:	no data available
Dissociation constant	:	no data available
Viscosity, dynamic	:	no data available

## 9.2. Other information

none

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

no data available

### 10.2. Chemical stability

No spontaneous or exothermic decomposition up to 100 °C.

### 10.3. Possibility of hazardous reactions



no data available

#### 10.4. Conditions to avoid

none

#### 10.5. Incompatible materials to avoid

Strong bases

#### 10.6. Hazardous decomposition products

no data available

### 11. TOXICOLOGICAL INFORMATION

#### 11.1. Information on toxicological effects

Acute oral toxicity : LD50 rat  
Dose: 2,500 mg/kg  
Test substance: The toxicological data has been taken from products of similar composition.

Acute dermal toxicity : LD50 rat  
Dose: 2,000 mg/kg  
Test substance: The toxicological data has been taken from products of similar composition.

Acute inhalation toxicity : LC50 rat  
Dose: > 5.9 mg/l  
Test substance: 500 g/l MCPA DMA

LC50 rat  
Dose: > 5.01 mg/l  
Test substance: (2,4-D DMA)

Skin irritation : rabbit  
Result: No skin irritation  
Test substance: The toxicological data has been taken from products of similar composition.

Eye irritation : rabbit  
Result: Severe eye irritation  
Test substance: The toxicological data has been taken from products of similar composition.

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



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Test substance: The toxicological data has been taken from products of similar composition.

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Toxicity to bees : Not toxic to bees.

Toxicity to fish : LC50 *Oncorhynchus mykiss* (Rainbow trout)  
Dose: 50 mg/l  
Testing period: 96 h  
Test substance: (MCPA)

LC50 *Pimephales promelas* (Fathead Minnow)  
Dose: 100 mg/l  
Testing period: 96 h  
Test substance: (2,4-D)

LC50 Toxicity to fish  
Dose: > 357 mg/l  
Testing period: 96 h  
Test substance: The toxicological data has been taken from products of similar composition.

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

EC50 *Daphnia*  
Dose: 100 mg/l  
Testing period: 48 h  
Test substance: (2,4-D)

EC50 *Daphnia*  
Dose: > 342 mg/l  
Testing period: 48 h  
Test substance: The toxicological data has been taken from products of similar composition.

Toxicity to algae : EC50 Toxicity to algae





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Dose: 24.2 mg/l  
Exposure time: 96 h  
Test substance: (2,4-D)

EC50 Toxicity to algae  
Dose: > 392 mg/l  
Exposure time: 120 h  
Test substance: (MCPA)

EbC50 Lemna gibba (Duckweed)  
Dose: 14 mg/l  
Exposure time: 7 d

NOEC Lemna gibba (Duckweed)  
Dose: 3.17 mg/l  
Exposure time: 7 d

EbC50 Toxicity to algae  
Dose: > 350 mg/l  
Test substance: The toxicological data has been taken from products of similar composition.

### 12.2. Persistence and degradability

Biodegradability : Readily biodegradable, according to appropriate OECD test.

Stability in soil : DT50: 13.6 d  
(2,4-D)  
DT50: 24 d  
(MCPA)

### 12.3. Potential bioaccumulation

Bioaccumulation : Does not bioaccumulate.

### 12.4. Mobility in soil

Kfoc= 12 - 42; 1/n=0.81 - 0.90 (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



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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 : In accordance with local and national regulations. Dispose of product and packaging in accordance with the "Code of practice for using plant protection products". A DEFRA publication

Contaminated packaging : Dispose of as unused product.

### 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.



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**14.4. Packaging group**

not applicable

**14.5. Environmental hazards**

not applicable

**14.6. Special precautions for user**

none

**15. REGULATORY INFORMATION**

**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 : 2017/04/05

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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