



## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**React Ultra**

Version 1 (UK)

Issuing date: 2014/11/25

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

#### 1.1. Product identifier

Trade name : **React Ultra**

#### 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 :  | Xn              | R22 - Harmful if swallowed.                                                                          |
|              | Xi              | R41 - Risk of serious damage to eyes.                                                                |
|              | N               | R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| EG_1272/08 : | AcuteTox.4      | H302 - Harmful if swallowed.                                                                         |
|              | EyeDam.1        | H318 - Causes serious eye damage.                                                                    |
|              | AquaticChronic2 | H411 - Toxic to aquatic life with long lasting effects.                                              |

#### 2.2. Label elements

according directive 1999/45/EG

Pictogram:



Xn



N

- R22 - Harmful if swallowed.  
 R41 - Risk of serious damage to eyes.  
 R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S35 - This material and its container must be disposed of in a safe way.  
 S39 - Wear eye/face protection.  
 S46 - If swallowed, seek medical advice immediately and show this container or label.  
 S57 - Use appropriate container to avoid environmental contamination.

REGULATION (EC) No 1272/2008

Pictogram:



GHS07



GHS09



GHS05

- H302 - Harmful if swallowed.  
 H318 - Causes serious eye damage.  
 H411 - Toxic to aquatic life with long lasting effects.
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P273 - Avoid release to the environment.  
 P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
 P330 - Rinse mouth.  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P501 - Dispose of contents/ container to an approved waste disposal plant.

**2.3. Other hazards**

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).



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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : Soluble liquid  
200 g/L MCPA + 200 g/L Mecoprop-P + 25 g/L Dicamba

#### Components:

##### MCPA

CAS-No.: 94-74-6  
EINECS-No. / ELINCS No.: 202-360-6  
REACH No.:  
Concentration: 16.8 % (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.

##### mecoprop-P

CAS-No.: 16484-77-8  
EINECS-No. / ELINCS No.: 240-539-0  
REACH No.: 01-2119447100-56  
Concentration: 16.8 % (w/w)

##### Classification:

EG\_1272/08 : AcuteTox.4 H302 - Harmful if swallowed.  
EyeDam.1 H318 - Causes serious eye damage.  
AquaticChronic2 H411 - Toxic to aquatic life with long lasting effects.  
EEC/67/548 : Xn R22 - Harmful if swallowed.  
Xi R41 - Risk of serious damage to eyes.  
N R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

##### Dicamba

CAS-No.: 1918-00-9  
EINECS-No. / ELINCS No.: 217-635-6  
REACH No.:  
Concentration: 2.1 % (w/w)

##### Classification:

EG\_1272/08 : AcuteTox.4 H302 - Harmful if swallowed.  
EyeDam.1 H318 - Causes serious eye damage.  
AquaticChronic3 H412 - Harmful to aquatic life with long lasting effects.  
EEC/67/548 : Xn R22 - Harmful if swallowed.  
Xi R41 - Risk of serious damage to eyes.  
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



## 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. Obtain medical attention.
- Skin contact : Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. 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. If conscious, drink plenty of water. If symptoms persist, call a physician.

### 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 : Carbon dioxide (CO<sub>2</sub>), Water spray, Alcohol-resistant foam, Dry chemical, Dry powder
- 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 : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Standard procedure for chemical fires.

## 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 contaminate water. 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 : Avoid contact with skin and eyes. Keep out of reach of children. Do not smoke.

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

Requirements for storage areas and containers : Store in original container. Keep in a dry, cool and well-ventilated place. Keep out of reach of children. Protect from frost.

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)

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                        |
|------------|------------|---------------------------------------|-----------------------------|
| MCPA       | 94-74-6    |                                       | no classification available |
| mecoprop-P | 16484-77-8 |                                       | no classification available |
| Dicamba    | 1918-00-9  |                                       | no classification available |

### 8.2. Exposure controls

#### Personal protective equipment

- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.
- Hand protection : PVC or nitrile-rubber gloves
- Eye protection : Goggles, , or:, Safety glasses
- Skin and body protection : lightweight protective clothing
- Hygiene measures : When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product.  
Take off contaminated clothing and shoes immediately.  
General industrial hygiene practice.
- Protective measures : Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### Appearance

- Form : liquid
- Colour : brown
- Odour : phenol-like
- Flash point : >100 °C
- Density : 1.204 g/cm<sup>3</sup>  
at 20 °C



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pH : 9.9

Surface tension : 49.8 mN/m  
at 20 °C

## 9.2. Other information

none

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

Stable under recommended storage conditions.

### 10.2. Chemical stability

No decomposition if stored and applied as directed.

### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

### 10.5. Incompatible materials to avoid

Strong acids and strong bases

### 10.6. Hazardous decomposition products

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute oral toxicity : LD50 rat  
Dose: 962 mg/kg  
Test substance: (MCPA)

LD50 rat  
Dose: 431 - 1,050 mg/kg  
Test substance: (mecoprop-P)



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LD50 rat  
Dose: 1,581 mg/kg  
Test substance: (Dicamba)

Acute dermal toxicity : LD50 rat  
Dose: > 4,000 mg/kg  
Test substance: (MCPA)

LD50 rabbit  
Dose: > 4,000 mg/kg  
Test substance: (mecoprop-P)

LD50 rabbit  
Dose: > 2,000 mg/kg  
Test substance: (Dicamba)

Acute inhalation toxicity : LC50 rat  
Exposure time: 4 h  
Dose: > 6.36 mg/l  
Test substance: (MCPA)

LC50 rat  
Exposure time: 4 h  
Dose: > 5.6 mg/l  
Test substance: (mecoprop-P)

LC50 rat  
Exposure time: 4 h  
Dose: 4.46 mg/l  
Test substance: (Dicamba)

Skin irritation : Classification: No skin irritation

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

Sensitisation : Classification: Not sensitizing to skin.





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## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

- Toxicity to birds : LC50 Toxicity to birds  
Dose: 270 mg/kg  
Test substance: (MCPA)
- : LC50 Toxicity to birds  
Dose: 497 mg/kg  
Test substance: (mecoprop-P)
- : LD50 Toxicity to birds  
Dose: 216 mg/kg  
Test substance: (Dicamba)
- Toxicity to bees : LD50 Bee  
Test substance: (MCPA)  
Value ( $\mu\text{g}/\text{Species}$ ): > 200
- : LD50 Bee  
Test substance: (mecoprop-P)  
Value ( $\mu\text{g}/\text{Species}$ ): > 83
- : LD50 Bee  
Test substance: (Dicamba)  
Value ( $\mu\text{g}/\text{Species}$ ): > 100
- Toxicity to earthworms : LC50 Eisenia fetida (earthworms)  
Dose: 325 mg/kg  
Test substance: (MCPA)
- : LC50 Eisenia fetida (earthworms)  
Dose: 988 mg/kg  
Test substance: (mecoprop-P)
- : LC50 Eisenia fetida (earthworms)  
Dose: > 1,000 mg/kg  
Testing period: 14 d  
Test substance: (Dicamba)
- Toxicity to fish : LC50  
Dose: > 100 mg/l  
Testing period: 96 h  
Test substance: (mecoprop-P)



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LC50  
Dose: 44 mg/l  
Testing period: 96 h  
Test substance: (MCPA)

LC50  
Dose: > 41 mg/l  
Testing period: 96 h  
Test substance: (Dicamba)

Toxicity to daphnia : LC50  
Dose: > 190 mg/l  
Testing period: 48 h  
Test substance: (MCPA)

EC50  
Dose: > 91 mg/l  
Testing period: 48 h  
Test substance: (mecoprop-P)

EC50  
Dose: 41 mg/l  
Testing period: 48 h  
Test substance: (Dicamba)

Toxicity to algae : EC50 Toxicity to algae  
Dose: 26.9 mg/l  
Exposure time: 72 h  
Test substance: (MCPA)

EC50 Toxicity to algae  
Dose: 16.2 mg/l  
Exposure time: 72 h  
Test substance: (mecoprop-P)

EC50 Toxicity to algae  
Dose: 1.8 mg/l  
Exposure time: 72 h  
Test substance: (Dicamba)

### 12.2. Persistence and degradability

Stability in soil : DT50: 24 d  
(MCPA)  
DT50: 8.2 d



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(mecoprop-P)

DT50: 4 d  
(Dicamba)

### 12.3. Potential bioaccumulation

Bioaccumulation : Does not bioaccumulate.

### 12.4. Mobility in soil

Koc = 10 - 157 (MCPA)  
Koc = 20 - 43 (pH 5.6 - 7.6), 135 - 167 (pH 4.3 - 4.4) [mecoprop]  
Kfoc = 3.45 - 21.2, 1/n=0.72 - 0.93 (Dicamba)

### 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 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 : Dispose of as unused product. Do not re-use empty containers.

## 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

#### 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



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**16. OTHER INFORMATION**

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

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