



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

**DUPLOSAN KV**

Version 1 (Ireland)

Issuing date: 2014/01/24

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

### 1.1. Product identifier

Trade name : **DUPLOSAN KV**

### 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	R38 - Irritating to skin.
	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 :	SkinIrrit.2	H315 - Causes skin irritation.
	EyeDam.1	H318 - Causes serious eye damage.
	AcuteTox.4	H302 - Harmful if swallowed.

### 2.2. Label elements

according directive 1999/45/EG

Pictogram:



Xn



N

- R22 - Harmful if swallowed.  
 R38 - Irritating to skin.  
 R41 - Risk of serious damage to eyes.  
 R51/53 - Toxic 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.  
 S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S36/37 - Wear suitable protective clothing and gloves.  
 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.  
 S35 - This material and its container must be disposed of in a safe way.

REGULATION (EC) No 1272/2008

Pictogram:



GHS05



GHS07

Signal word: Danger

- H302 - Harmful if swallowed.  
 H315 - Causes skin irritation.  
 H318 - Causes serious eye damage.
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 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.  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
 P332 + P313 - If skin irritation occurs: Get medical advice/ attention.



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### 2.3. Other hazards

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : Soluble liquid  
Mecoprop-P 600g/l as the potassium salt

### 3.2. Mixtures

#### Components:

#### mecoprop-P

CAS-No.: 16484-77-8  
EINECS-No. / ELINCS No.: 240-539-0  
REACH No.: 01-2119447100-56  
Concentration: 48.2 % (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.

#### potassium hydroxide

CAS-No.: 1310-58-3  
EINECS-No. / ELINCS No.: 215-181-3  
REACH No.: 01-2119487136-33  
Concentration: 12% - 17% (w/w)

#### Classification:

EG\_1272/08 : AcuteTox.4 H302 - Harmful if swallowed.  
SkinCorr.1A H314 - Causes severe skin burns and eye damage.  
EEC/67/548 : Xn R22 - Harmful if swallowed.  
C R35 - Causes severe burns.

## 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 all contaminated clothing immediately. Wash off



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- 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<sub>2</sub>), 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, Cl<sub>2</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

- 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 : 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)

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
mecoprop-P	16484-77-8		no classification available, (according to S.I. No. 619 of 2001)
potassium hydroxide	1310-58-3	2 mg/m <sup>3</sup>	(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
- 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

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

#### Appearance

- Physical state : liquid
- Colour : brown
- Odour : amine-like
- Start of crystallisation : -20 °C
- Flash point : > 100 °C
- Auto-ignition temperature : >400 °C
- Vapour pressure : 2.3E+00 Pa  
(mecoprop-P)
- Density : 1.24 g/cm<sup>3</sup>  
at 20 °C
- Water solubility : completely soluble
- pH : 9
- Partition coefficient: n-  
octanol/water : log POW = 0.02  
at 20 °C



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(pH 7), (mecoprop-P)

log POW = -0.18  
at 20 °C

(pH 9), (mecoprop-P)

Viscosity, dynamic : ca.33 mPa.s  
at 20 °C

## 9.2. Other information

none

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

no data available, not applicable

### 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

No dangerous reaction known under conditions of normal use.

### 10.5. Incompatible materials to avoid

Incompatible with acids.

### 10.6. Hazardous decomposition products

none

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute oral toxicity : LD50 rat



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Dose: 500 - 2,000 mg/kg

- Acute dermal toxicity : LD50 rat  
Dose: > 4,000 mg/kg
- Acute inhalation toxicity : LC50 rat  
Exposure time: 4 h  
Dose: > 5.4 mg/l
- Skin irritation : Result: irritating
- Eye irritation : rabbit  
Result: Severe eye irritation  
Remarks: Risk of serious damage to eyes.
- Sensitisation : Result: Did not cause sensitization.

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

- Toxicity to fish : LC50  
Dose: > 100 mg/l  
Testing period: 96 h  
Test substance: (mecoprop-P)
- Toxicity to daphnia : LC50  
Dose: > 91 mg/l  
Testing period: 48 h  
Test substance: (mecoprop-P)
- Toxicity to algae : EC50 Toxicity to algae  
Dose: 16.2 mg/l  
Exposure time: 72 h  
Test substance: (mecoprop-P)
- EC50 Lemna gibba (Duckweed)  
Dose: 1.6 mg/l  
Test substance: (mecoprop-P)





## 12.2. Persistence and degradability

Biodegradability : Readily biodegradable.

Stability in soil : DT50: 6.3 - 8.2 d  
(mecoprop-P)

## 12.3. Potential bioaccumulation

Bioaccumulation : Does not bioaccumulate.

## 12.4. Mobility in soil

Koc = 135 - 167 (mecoprop-P)

## 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.

Contaminated packaging : Dispose of in accordance with local regulations.

## 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

Print Date : 2014/01/24

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

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.

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