



## SAFETY DATA SHEET

HYBAN P

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Revision No: 1

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### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product Name: Hyban P  
Product Number(s):

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

Herbicide

#### 1.3 Details of the supplier of the safety data sheet

Agrichem (International) Limited,

Industrial Estate, Station Road, Whittlesey,

Cambs. PE7 2EY, United Kingdom

**Tel:** 01733-204019

**Fax:** 01733-204162

**Email:** [admin@agrichem.co.uk](mailto:admin@agrichem.co.uk)

#### 1.4 Emergency telephone number

Emergency tel: 01733-204019

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### Section 2: Hazards identification

#### 2.1 Classification according to Regulation (EC) 1272/2008 [EU-GHS/CLP]

Eye Dam. 1 H318, Skin Irrit. 2 H315, H412

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP):

**Hazard pictogram:**

**Signal words:**

**Hazard statements:**

GHS05: Corrosive

Danger

H318: Causes serious eye damage

H315: Causes skin irritation

H412: Harmful to aquatic life with long lasting effects

EUH401: To avoid risk to human health and the environment, comply with the instructions for use.



**Precautionary statements:**

P264: Wash exposed skin thoroughly after handling  
 P273: Avoid release to the environment  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+352: IF ON SKIN: Wash with plenty of soap and water.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P312: Immediately call a POISON CENTER or doctor/physician if you feel unwell.  
 P362: Take off contaminated clothing and wash before reuse.  
 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**  
 Not available

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**Section 3: Composition/information on ingredients**
**3.1 Substances**  
 Not available

**3.2 Mixtures**

Name	No.	Classification	% Wt.
(R) and (S)-2-(4-Chloro-2-methylphenoxy) propionic acid, potassium salt	CAS No: 66423-05-0 EINECS: 240-539-0 REACH:	H302 Acute Tox. 4 H318 Eye Dam. 1 H411 Aquatic Chronic 2	10-20%
3,6-dichloro-2-methoxybenzoic acid (Dicamba)	CAS No: 1918-00-9 EINECS: 217-635-6 REACH:	H302 Acute Tox. 4 H332 Acute Tox. 4 H318 Eye Dam 1 H411 Aquatic Chronic 2	1-2%
Potassium hydroxide	CAS No: 1310-58-3 EINECS: 215-181-3 REACH:	H302 Acute Tox. 4 H314 Skin Corr. 1A	0-0.5%

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**Section 4: First Aid Measures**
**4.1 Description of First Aid Measures**

**Eye Contact:** If substance has got into the eyes, immediately wash out with plenty of water for at least 10 minutes maintaining eyelids open. Protect unharmed eye. Take care not to wash the chemical from one eye into the other. Obtain medical attention immediately (show this Safety Data Sheet)

**Skin Contact:** Remove contaminated clothing immediately. If skin contamination occurs wash immediately with plenty of clean, gently flowing water for at least 10 minutes. Repeat skin decontamination process until all signs of chemicals have gone. Obtain medical attention immediately (show this Safety Data Sheet)

**Ingestion:** If ingestion is suspected, do not induce vomiting. If conscious, drink plenty of water. Obtain medical attention immediately (show this Safety Data Sheet)

**Inhalation:** Move to fresh air. If there is breathing difficulty or coughing, keep patient at rest seated in position of maximum comfort. Obtain medical attention immediately (show this Safety Data Sheet)

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

Not available

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

Immediately wash eyes with water

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**Section 5: Firefighting Measures**

**5.1 Extinguishing media**

Extinguish with carbon dioxide, dry chemical, foam or water spray

**5.2 Special hazards arising from the substance or mixture**

May give off toxic fumes in a fire

**5.3 Advice for firefighters**

Chemical protection suit to prevent contact with skin and eyes, suitable gloves for fire-fighters, boots and self-contained breathing apparatus

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**Section 6: Accidental Release Measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear appropriate protective clothing (see Section 8)

**6.2 Environmental precautions**

Do not allow product to enter drains or water courses

**6.3 Methods and material for containment and cleaning up**

Soak up with inert absorbent material, place in suitable labelled containers and dispose as hazardous waste. Where appropriate, refer to Sections 8 and 13

**6.4 Reference to other sections**

Refer to Sections 8 and 13

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**Section 7: Handling and Storage**

**7.1 Precautions for safe handling**

When using, do not eat, drink or smoke. Avoid direct contact with the substance

**7.2 Conditions for safe storage, including any incompatibilities**

Keep containers tightly closed in a dry, cool and well-ventilated place to which children do not have access. Keep away from food, drink and animal feedstuff

**7.3 Specific end use(s)**

Not Available

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**Section 8: Exposure Controls/Personal Protection**

**8.1 Control Parameters**

**Occupational Exposure Standards:**

**Chemical Name**

(R)-2-(4-Chloro-2-methylphenoxy)  
propionic acid, potassium salt

**National Occupational Exposure Limits**

WEL (8 hr TWA): 10 mg/m<sup>3</sup>  
WEL (15 min STEL): 20 mg/m<sup>3</sup>

3,6-dichloro-2-methoxy benzoic acid, OEL: 10 mg/m<sup>3</sup>  
acid, potassium salt

Potassium hydroxide WEL (15 min STEL): 2 mg/m<sup>3</sup>

## 8.2 Exposure Controls

<b>Engineering Control Measures:</b>	The usual precautionary measures for handling chemicals should be observed
<b>Hygiene Measures:</b>	When using do not eat, drink or smoke. Shower or bathe at the end of working
<b>Respiratory Protection:</b>	Wear suitable respiratory equipment
<b>Skin and Body:</b>	Wear suitable protective clothing
<b>Hands:</b>	Wear chemical resistant gloves
<b>Eyes:</b>	Wear suitable eye/face protection

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## Section 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance:</b>	Clear brown liquid
<b>Odour:</b>	Slight Phenolic
<b>pH:</b>	(9 – 11.5)
<b>Specific Gravity:</b>	1.07 g/ml @ 20°C (typical)
<b>Boiling Point:</b>	No data available
<b>Melting Point/Range:</b>	Not applicable, aqueous solution
<b>Decomposition Temp.:</b>	No data available
<b>Flash Point:</b>	No data available
<b>Auto Ignition Temp.:</b>	No data available
<b>Flammability:</b>	Not applicable, aqueous solution
<b>Explosive Properties:</b>	No data available
<b>Oxidising Properties:</b>	No data available
<b>Vapour Pressure:</b>	No data available
<b>Bulk Density:</b>	Not applicable, aqueous solution
<b>Solubility (Water):</b>	Soluble in water
<b>Solubility (Fat Solvent):</b>	No data available
<b>Partition Coefficient:</b>	(CMPP-P) Log P <sub>ow</sub> = -0.39 @ pH 7 (Dicamba) Log P <sub>ow</sub> = -1.9 (Octanol/Water 25°C; pH 8.9)
<b>Viscosity:</b>	No data available

### 9.2 Other information

Not Available

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## Section 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended transport or storage conditions

### 10.2 Chemical stability

Stable under recommended storage conditions

### 10.3 Possibility of hazardous reactions

Not Available

### 10.4 Conditions to avoid

Avoid direct heat protect from frost

## 10.5 Incompatible materials

Avoid strong acids, strong bases and oxidising agents

## 10.6 Hazardous decomposition products

May generate toxic fumes of carbon dioxide and carbon monoxide

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## Section 11: Toxicological information

### 11.1 Information on toxicological effects

#### CMPP-P K 600 g/l AI

##### Acute Toxicity:

##### Ingestion:

LD<sub>50</sub>/oral/rat = 500-2000 mg/kg. Harmful if swallowed

##### Skin Contact:

LD<sub>50</sub>/dermal/rat > 2000 mg/kg

##### Inhalation:

LC<sub>50</sub>/inhalation/4h/rat = > 5.4 mg/l

##### Skin Contact:

There may be irritation and redness at the site of contact

##### Eye Contact:

There may be irritation and redness. The eyes may water profusely

##### Ingestion:

There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting

##### Inhalation:

No symptoms

##### Delayed/Immediate Effects:

Immediate effects can be expected after short-term exposure

#### Dicamba Technical (≥ 97% w/w)

##### Acute Toxicity:

LD<sub>50</sub>/oral/rat 1879 mg/kg

LD<sub>50</sub>/dermal/rat >2000 mg/kg

LC<sub>50</sub>/inhalation/4h/rat 5.19 mg/l air

##### Eye Irritation:

Severely irritating

##### Skin Irritation:

Mildly irritating

##### Sensitization:

Not skin sensitising

##### Mutagenic/Carcinogenic/

Negative

##### Teratogenicity/Reproductive/STOT:

#### Potassium Hydroxide

##### Toxicity:

LD<sub>50</sub>/oral/rat = 273 mg/kg. Strong caustic effect

##### Inhalation:

No data available

##### Eye:

Strong caustic effect

##### Skin:

Strong caustic effect

##### Sensitization:

None known

##### Mutagenic/Carcinogenic/

No data available

##### Teratogenicity/Reproductive/STOT:

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## 12 ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Dicamba Technical

**Toxicity to Fish:** LC<sub>50</sub> Oncorhynchus mykiss (Rainbow Trout) 135.4 mg/l, 96h

**Toxicity to Aquatic Invertebrates:** EC<sub>50</sub> Daphnia magna (Water Flea) 110.7 mg/l, 48h

**Toxicity to Aquatic Plants:** EbC<sub>50</sub> Anabaena flos-aquae (Bluegreen algae) 43.1 mg/l, 72h

ErC<sub>50</sub> Anabaena flos-aquae (Bluegreen algae) 44.9 mg/l, 72h

NOEC Lemna gibba (Duckweed) 0.25 mg/l, 14d

**Toxicity to Bacteria:** IC<sub>50</sub> activated sewage sludge >500 mg/l, 3h

### 12.2 Persistence & Degradability

Biodegradability: Not readily biodegradable

Stability in Water: Degradation half life: 35 - 46 d. Not persistent in water

Stability in Soil: Degradation half life: 1.4 - 11 d. Not persistent in soil

### 12.3 Bioaccumulative Potential

Dicamba has low potential for bioaccumulation

### 12.4 Mobility

Dicamba has very high mobility in soil

### 12.5 Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)

This substance is not considered to be very persistent nor very bioaccumulating (vPvB)

### 12.6 Other Adverse Effects

None known

#### Potassium Hydroxide

**Aquatic Toxicity:** LC<sub>50</sub> (96h) 80 mg/l (Gambusia affinis)

### 12.2 Persistence & Degradability

Methods for the determination of biodegradability are not applicable to inorganic substances

### 12.3 Bioaccumulative Potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected

### 12.4 Mobility

Water hazard class 1 (German Regulation) (Assessment by list): Slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized

### 12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

### 12.6 Other Adverse Effects

No further relevant information available

#### CMPP-P K 600 g/l AI

**Ecotoxicity:** Algae 72 h; IC<sub>50</sub>: 204 mg/l (MCP-p-DMA)

Daphnia 48 h; EC<sub>50</sub>: 272 mg/l (MCP-p DMA)

Fish Rainbow Trout 96 h; LC<sub>50</sub>: 127 mg/l (MCP-p DMA)

### 12.2 Persistence & Degradability

Rapidly biodegradable

### 12.3 Bioaccumulative Potential

Potential for bioaccumulation is low based on log Pow

### 12.4 Mobility

Fairly mobile but rapidly degraded in aerobic soils

**12.5 Results of PBT and vPvB assessment**  
This substance is not identified as a PBT substance

**12.6 Other Adverse Effects**  
Lemna gibba 14 day EC<sub>50</sub> 1.6 mg/l

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### Section 13: Disposal considerations

**13.1 Waste treatment methods**  
**Product Disposal:** Dispose of according to local and national regulations  
**Container Disposal:** Triple rinse containers with water and dispose of according to local and national regulations

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### Section 14: Transport Information

Not classified as hazardous for road transport under ADR

**14.1 UN number**  
**14.2 UN proper shipping name**  
**14.3 Transport hazard class(es)**  
**14.4 Packing group**  
**14.5 Environmental hazards**  
**14.6 Special precautions for user**  
**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

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### Section 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No data available  
**15.2 Chemical safety assessment**  
No data available.

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### Section 16: Other information

#### Text of Phrases mentioned in Sections 2 and 3:

#### H-Statements

**H302** Harmful if swallowed  
**H332** Harmful if inhaled  
**H314** Causes severe skin burns and eye damage  
**H315** Causes skin irritation  
**H318** Causes serious eye damage

**H411** Toxic to aquatic life with long lasting effects  
**H315** Causes skin irritation  
**H412** Harmful to aquatic life with long lasting effects

*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 guidance for safe handling, use, processing, storage, transportation, disposal, release and is not to be considered a warranty of 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*