SAFETY DATA SHEET
HYGRASS P

Compilation date: 23/02/2015
Revision No: 1

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

1.1 Product identifier
Product Name: Hygrass 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

1.4 Emergency telephone number
Emergency tel: 01733-204019

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: GHS05: Corrosive
Signal words: Danger
Hazard statements: 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
P310: Immediately call a POISON CENTER or doctor/physician
P302+P352: 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
P332+P313: If skin irritation occurs: Get medical advice/attention
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

Section 3: Composition/information on ingredients

3.1 Substances
Not available

3.2 Mixtures

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

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>National Occupational Exposure Limits</th>
</tr>
</thead>
</table>
| (R)-2-(4-Chloro-2-methylphenoxy) propionic acid, potassium salt | WEL (8 hr TWA): 10 mg/m³  
|                                         | WEL (15 min STEL): 20 mg/m³           |
| 3,6-dichloro-2-methoxy benzoic acid, acid, potassium salt     | OEL: 10 mg/m³                         |
| Potassium hydroxide                    | WEL (15 min STEL): 2 mg/m³            |
8.2 Exposure Controls

Engineering Control: The usual precautionary measures for handling chemicals should be observed.

Hygiene Measures: When using do not eat, drink or smoke. Shower or bathe at the end of working.

Respiratory Protection: Wear suitable respiratory equipment.

Skin and Body: Wear suitable protective clothing.

Hands: Wear chemical resistant gloves.

Eyes: Wear suitable eye/face protection.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Clear brown liquid.

Odour: Slight Phenolic.

pH: (9 – 11.5)

Specific Gravity: 1.07 g/ml @ 20°C (typical).

Boiling Point: No data available.

Melting Point/Range: Not applicable, aqueous solution.

Decomposition Temp.: No data available.

Flash Point: No data available.

Auto Ignition Temp.: No data available.

Flammability: Not applicable, aqueous solution.

Explosive Properties: No data available.

Oxidising Properties: No data available.

Vapour Pressure: No data available.

Bulk Density: Not applicable, aqueous solution.

Solubility (Water): Soluble in water.

Solubility (Fat Solvent): No data available.

Partition Coefficient: (CMPP-P) \( \log P_{ow} = -0.39 \) @ pH 7

(Dicamba) \( \log P_{ow} = -1.9 \) (Octanol/Water 25°C; pH 8.9)

Viscosity: No data available.

9.2 Other information

Not Available.

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 A1**

**Acute Toxicity:**
- **Ingestion:** LD$_{50}$/oral/rat = 500-2000 mg/kg. Harmful if swallowed
- **Skin Contact:** LD$_{50}$/dermal/rat > 2000 mg/kg
- **Inhalation:** LC$_{50}$/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$_{50}$/oral/rat 1879 mg/kg
- LD$_{50}$/dermal/rat >2000 mg/kg
- LC$_{50}$/inhalation/4h/rat 5.19 mg/l air
- **Eye Irritation:** Severely irritating
- **Skin Irritation:** Mildly irritating
- **Sensitization:** Not skin sensitising
- **Mutagenicity/Carcinogenicity/Reproductive/STOT:** Negative

**Potassium Hydroxide**

**Toxicity:** LD$_{50}$/oral/rat = 273 mg/kg. Strong caustic effect
- **Inhalation:** No data available
- **Eye:** Strong caustic effect
- **Skin:** Strong caustic effect
- **Sensitization:** None known
- **Mutagenicity/Carcinogenicity/Reproductive/STOT:** No data available

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12 **ECOLOGICAL INFORMATION**
12.1.  Toxicity

**Dicamba Technical**

**Toxicity to Fish:**  
**LC₅₀** Oncorhynchus mykiss (Rainbow Trout) 135.4 mg/l, 96h

**Toxicity to Aquatic Invertebrates:**  
**EC₅₀** Daphnia magna (Water Flea) 110.7 mg/l, 48h

**Toxicity to Aquatic Plants:**  
**EbC₅₀** Anabaena flos-aquae (Bluegreen algae) 43.1 mg/l, 72h  
**ErC₅₀** Anabaena flos-aquae (Bluegreen algae) 44.9 mg/l, 72h  
**NOEC** Lemna gibba (Duckweed) 0.25 mg/l, 14d

**Toxicity to Bacteria:**  
**IC₅₀** 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:**  
**LC₅₀** (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 Al**

**Ecotoxicity:**  
Algae 72 h; **IC₅₀**: 204 mg/l (MCPP-p-DMA)  
Daphnia 48 h; **EC₅₀**: 272 mg/l (MCPP-p DMA)  
Fish Rainbow Trout 96 h; **LC₅₀**: 127 mg/l (MCPP-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 EC₅₀ 1.6 mg/l

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

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

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

Section 16: Other information

Text of Phrases mentioned in Sections 2 and 3:

H-Statements
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H315 Causes skin irritation
H318 Causes serious eye damage
H332 Harmful if swallowed
H411 Toxic to aquatic life with long lasting effects
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.

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.