

MSDS Number: 181

Agrichem (International) Limited

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Material Safety Data Sheet

SECTION 1 Identification of Product Name and Company	
Agrichem (International) Limited	Industrial Estate, Station Road, Whittlesey, PETERBOROUGH, Cambridgeshire PE7 2EY. Tel: (01733) 204019 Fax: (01733) 204162 e-mail contact: admin@agrichem.co.uk
Product Name:	Hysward P
Synonyms:	Hyprone P
Intended Use:	Herbicide for control of broad leaved weeds in agricultural grassland and amenity grass.

SECTION 2 Hazards Identification	
Most important hazards:	Irritating to eyes.

SECTION 3 Composition/Information on Ingredients			
Formulation:	Aqueous solution of potassium salts.		
<u>IUPAC Names:</u>	<u>CAS-No</u>	<u>EEC-No</u>	<u>Concentration:</u>
9.16% w/w 2-(4-chloro-2-methylphenoxy) acetic acid, potassium salt. Class: Xn; R20/21/22.	5221-16-9	226-015-4	101g/L, 9.16% w/w
R-2(4-chloro-2-methyl phenoxy) propionic acid (mecoprop P), potassium salt. Class: Xn; R22, Xi; R41, N, R51/53.	66423-05-0		92 g/L, 8.35% w/w
S-2(4-chloro-2-methyl phenoxy) propionic acid (mecoprop P), potassium salt.			0.49% w/w
3,6-dichloro-2-methoxybenzoic acid (dicamba). Class: Xn; R22, R41, R52/53.	1918-00-9	217-635-6	16g/L, 1.45% w/w
See 16, Other Information for text of R phrases.			

SECTION 4 First Aid Measures	
General:	If a person feels unwell after coming into contact with this product then seek medical attention immediately. Remove contaminated clothing and wash thoroughly with soap and water. If unconscious, check breathing and pulse (heartbeat). Give artificial ventilation and chest compression if necessary. If unconscious but breathing and pulse are normal. Place in recovery position.
Inhalation:	Remove patient from exposure. Seek medical attention.
Ingestion:	DO not induce vomiting, seek immediate medical attention.
Skin Contact:	Remove contaminated clothing and wash thoroughly with soap and water.
Eye Contact:	Irrigate with clean water for at least 15 minutes.
Guide to Doctor:	Treat as for Phenoxyacetate poisoning. Symptoms include hypersalivation, stomach cramps, vomiting and diarrhoea. No specific antidotes, treat symptomatically.

SECTION 5 Fire Fighting Measures	
Suitable extinguishing media:	Extinguish fire with water, foam or Carbon Dioxide (CO ₂). Do not use direct water spray.
Special protective equipment for firefighters:	May give off toxic fumes in a fire. Wear breathing apparatus and protective equipment.

SECTION 6 Accidental Release Measures	
Personal protection:	Avoid contact with skin, eyes, or clothing. Do not inhale mists, aerosols or dusts. Avoid ingestion. Wear suitable protective clothing, boots, gloves and eye protection.
Environmental precautions:	Do NOT contaminate surface waters or ditches with chemical or used containers. Minimise spray drift onto adjoining fields or water bodies.
Spillage and Decontamination:	Contain and absorb spillage with sand, sawdust or similar material. Dispose of via reputable contractor or local authority. Do not allow spillage to contaminate water courses or drains. NB. Inform local Water PLC immediately if spillage enters drains, and report any contamination of surface water of ground waters to the National Rivers Authority or River Purification Board.

SECTION 7 Handling and Storage	
Handling:	Ensure there is sufficient ventilation of the area. Avoid contact with skin/eyes. Do NOT inhale mists. Avoid ingestion. When using do not eat, drink or smoke. Wash hands and exposed skin before meals and after work.
Storage:	Store and load away from foodstuffs and seeds and protect from children. Keep tightly closed in original container and store in a suitable pesticide store.
Packing:	Freestanding 10L drums.

SECTION 8 Exposure Controls/Personal Protection	
National occupational exposure limits	
4-chloro-2 methylphenoxy acetic acid (MCPA), potassium salt <i>R</i> -2(4-chloro-2-methyl phenoxy) propionic acid (mecoprop P), potassium salt. <i>S</i> -2(4-chloro-2-methyl phenoxy) propionic acid (mecoprop P), potassium salt. 3,6-dichloro-2-methoxybenzoic acid (dicamba).	None assigned for any ingredient in current UK HSE publication EH40. Based on the value for the chemically similar material, technical 2,4D acid the calculated salt equivalent long term limit is 12mg/m ³ (8hr), or 24mg/m ³ (15 min). Based on the value for the chemically similar material, technical 2,4D acid the calculated salt equivalent long term limit is 12mg/m ³ (8hr), or 24mg/m ³ (15 min). Note: where the product contains both R and S isomers, the Occupational Exposure Limit quoted is for the S & R isomers combined. None assigned in current UK HSE publication EH40.
Engineering Measures to Reduce Exposure.	
Respiratory protection:	In case of insufficient ventilation wear suitable respiratory equipment.
Hand protection:	Wear suitable gloves resistant to chemical penetration. Gloves must meet the requirements of European Standard EN 374:1994
Eye protection:	Wear suitable eye protection.
Hygiene measures:	When using do not eat, drink or smoke. Shower or bathe at the end of working.

SECTION 9 Physical and Chemical Properties			
Appearance:	Dark brown liquid		
Odour:	Distinctive phenoxy smell		
Melting Point:	Not applicable, aqueous solution.	Auto Ignition Temperature:	No data.
Boiling Point:	> 100°C	Solubility in Water:	Fully miscible in water.
pH:	10.5 - 12.0	Solubility in Organic Solvents:	No data.
Flash Point:	not applicable	Partition coefficients:	No data.
Explosive properties:	No data.	Viscosity:	No data.
Bulk density:	Not applicable, aqueous solution.	Vapour Pressure:	No data.
Relative Density:	1.0 g/l at 20°C		


SECTION 10 Stability and Reactivity	
Stability:	Stable under recommended storage conditions.
Conditions to avoid:	Exothermic reactions with strong acids.
Materials to avoid:	Strong acids and oxidizing agents.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide (CO ₂), Hydrogen chloride gas.

SECTION 11 Toxicological Information	
Inhalation:	mecoprop-p (a.i.) irritant to mucous membranes and lungs
Inhalation LC ₅₀ :	dicamba (a.i.): (rat) > 9.6 mg/L (4 hour). mecoprop-p (a.i.): (rat) > 5.6 mg/L (4 hour) MCPA (a.i.): (rat) > 5.21 mg/L (4 hour)
Oral LD ₅₀ :	(rat) 3000 mg/kg (calculated)
Skin Contact:	mecoprop-p (a.i.): harmful in contact with skin. MCPA (a.i.): harmful in contact with skin.
Dermal LD ₅₀ :	Mecoprop-p (a.i.): (rat) 1460mg/kg body weight. Dicamba & MCPA (a.i.'s) : >2000 mg/kg body weight.
Eye Contact:	All active show Risk of serious damage to eyes. Always wear suitable eye protection.
Mutagenic Data:	Not mutagenic in Ames test.

SECTION 12 Ecological Information	
Mobility:	Fairly mobile but rapidly degraded in aerobic soils
Persistence /degradability:	Rapidly degraded in aerobic soils.
Bioaccumulation	Potential for bioaccumulation is low based on log POW.
Ecotoxicity:	dicamba (a.i.): (rainbow trout) LC ₅₀ 135 mg/L 96 hours. For mecoprop - p (a.i.): (rainbow trout) LC ₅₀ > 150 mg/L (96 hours) For dicamba (a.i.): (rainbow trout) LC ₅₀ > 135.4 mg/L (96hr) Bluegill LC ₅₀ 135.3 mg/L.

SECTION 13 Disposal Considerations	
Product	Do not contaminate ponds, waterways and ditches with chemical or used container.
Disposal & Container	By incineration in accordance with the current UK legislation.
Disposal:	For minor incidents or unwanted product follow the guidance of the disposal of pesticides and containers as given in part 5 of the MAFF/HSE Pesticide code of Practice for the safe use of Pesticides on Farms and Holdings.

SECTION 14 Transport Information	
Not classified as dangerous in the meaning of transport regulations.	

SECTION 15 Regulatory Information	
MAFF No:	09052. This product is approved under the Control of Pesticides Regulations 1986.
Classification according to the current UK Chemical (Hazard Information and Packaging for Supply) Regulations.	
Contains:	1.45% w/w dichloro-2-methoxy-benzoic acid, 8.35% w/w (R)-2-(4-chloro-2-methylphenoxy) propionic acid as the potassium salts, 9.16% w/w (4-chloro-2-methylphenoxy) acetic acid, potassium salt and 0.49% w/w (S)-2-(4-chloro-2-methylphenoxy) propionic acid, potassium salt as an impurity.
	
	Xi IRRITANT
Risk Phrases:	R36 Irritating to eyes. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
Safety Phrases	S2 Keep out of the reach of children. S26 In case of contact with eyes, rinse immediately with plenty of water and seek immediate medical advice. S39 Wear suitable eye/face protection. S46 If swallowed, seek medical advice immediately and show this container or label. S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

SECTION 16 Other Information	
R20/21/22	Harmful if by inhalation, in contact with the skin and 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.

The data given in this sheet is based on current knowledge and experience and is given in good faith but without guarantee of accuracy and no liability is accepted whatsoever for any insufficiency or inaccuracy in such data in any case whatsoever.

The purpose of the Material Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regards to materials, properties or use.