



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product	Resolva Lawn Weed Killer Extra Concentrate
Usage	Herbicide
Supplier	Westland Horticulture Ltd 14 Granville Industrial Estate Granville Road Dungannon County Tyrone BT70 1NJ
Email	customerservice@WestlandHorticulture.com
Emergency Tel	01480 443789 (UK)

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:

Not classified

Classification of the Substance or Mixture According to Directive 67/548/EEC or Directive 1999/45/EC:

Not classified

Label Elements According to Regulation (EC) No 1272/2008:

Hazard Pictograms Not classified

Signal Word Not classified

Hazard Statements Not classified

Precautionary Statements

P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children
P103	Read label before use
P501	Dispose of contents/container in a safe way
P261	Avoid breathing mist

Supplemental Information

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

SP1 Do not contaminate water with the product or its container (Do not clean application equipment near surface water)

Label Elements According to Directive 67/548/EEC or Directive 1999/45/EC:

Hazard Pictograms Not classified

R- Phrases Not classified

S- Phrases

S2 Keep out of reach of children

S46 If swallowed seek medical advice immediately and show this container or label

S23 Do not breathe spray

S51 use only in well ventilated areas




S25 Avoid contact with eyes

FS 51 Do not contaminate ponds, waterways or ditches with chemical or used container

3. COMPOSITION/INFORMATION ON INGREDIENTS

Description Herbicide containing 37.55 g/l Mecoprop-P and 4.675 g/l Dicamba as a soluble concentrate

Hazardous Ingredients

Ingredient	Identifiers	Concentration on %W/W	Warning Symbols	Directive 67/548/EEC	Regulation (EC) No 1272/2008 (CLP)
(R)and (S)-2-(4-Chloro-2-methylphenoxy) propionic acid potassium salt (Mecoprop-P)	EC: 240-539-0 CAS: 66423-05-0	3.45 % W/W		Xn; R20/22 Xi; R41 N; R51/53	Acute Tox. 4 H302 Eye Dam. 1 H318 Aquatic Chr. 2 H411
3,6-dichloro-2-methoxy benzoic acid (Dicamba)	EC: 217-635-6 CAS: 1918-00-9	0.35% W/W		Xn; R20/22 Xi; R41 N; R51/53	Acute Tox. 4 H302, H332 Eye Dam. 1 H318 Aquatic Chr. 2 H411
Potassium Hydroxide	EC: 215-181-3 CAS: 1310-58-3	0 - 0.5%		Xn; R22 C; R35	Acute Tox. 4 H302 Skin Corr. 1A H314

For the full text of the R phrases mentioned in this section, see section 16.



4. FIRST AID MEASURES

- General Advice:** Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or physician, or going for treatment.
- Inhalation:** Move person to fresh air.
If there is breathing difficulty or coughing, keep patient warm and at rest.
Seek medical advice immediately.
- Skin Contact:** Take off all contaminated clothing.
Wash all exposed skin area with mild soap and gently flowing water for at least 10 minutes
If skin irritation persists call a physician.
Wash contaminated clothing before re-use.
- Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses and continue flushing.
Take care not to wash the chemical from one eye into the other
Seek medical attention immediately.
- Ingestion:** Rinse mouth with water if the person is conscious
Do NOT induce vomiting.
Seek medical advice immediately and show container or label.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Specific Hazards Arising From the Substance Or Mixture:

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (HCl, Cl₂, CO, CO₂, NO_x).
Exposure to decomposition products may be a hazard to health

Special Protective Equipment for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus.

Further Information:

Standard procedure for chemical fires.
Collect contaminated fire extinguishing water separately
Do not allow run-off from fire fighting to enter drains or water courses.
Use water spray or fog for cooling exposed containers



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear personal respiratory and eye protective equipment; refer to protective measures listed in sections 8.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.

Methods and Materials For Containment And Cleaning Up:

Contain spillage, and then soak up with non-combustible absorbent material (e.g. sand, silica gel, acid binder, universal binder). Sweep and shovel into suitable containers for disposal according to local / national regulations

Additional Advice: If the product contaminates rivers and lakes or drains inform respective authorities.

7. HANDLING AND STORAGE

Handling:

- Do not eat, drink or smoke when using this product
- Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work
- Handle in accordance with good industrial hygiene and safety procedures
- Do not breathe spray

Storage:

- Store in original container.
- Keep away from naked lights
- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep out of reach of children
- Keep away from food, drink and animal feeding stuffs

Specific End Uses:

Use only as herbicide according to the instruction on the label



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Ingredients with limit values that require monitoring at the workplace:

Ingredient	Work Exposure Limit (WEL)	
	Long-term Exposure Limit (8-hr TWA reference period)	Short-term Exposure Limit (15 minute reference period)
(R)-2-(4-Chloro-2-methylphenoxy)propionic acid potassium salt (Mecoprop-P)	10 mg/m ³	20 mg/m ³
3,6-dichloro-2-methoxy benzoic acid, potassium salt (Dicamba)	10 mg/m ³	
Potassium Hydroxide		2 mg/m ³

Engineering Control Measures: The normal precautionary measures for handling chemicals should be observed

Protective Measures: Avoid contact with skin, eyes and clothing.

- **Respiratory Protection:** No personal respiratory protective equipment normally required when used with adequate ventilation
- **Hand Protection:** Wear chemical resistant gloves.
- **Eye Protection:** Safety glasses or goggles
- **Skin and Body Protection:** Lightweight protective clothing appropriate to the conditions of use

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
Shower or bath at the end of working



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear brown liquid
Odour: Slight phenolic odour

Other Properties:

	Value	Temperature	Method
pH	9.6 – 11.5		
Density	1.022 g/ml	20°C	
Solubility	Completely soluble in water		

No other data available

10. STABILITY AND REACTIVITY

Hazardous Decomposition: The product is stable under normal conditions of use and storage
Combustion or thermal decomposition will evolve toxic or irritant vapours:
hydrogen chloride, halogens, nitrogen oxides, carbon monoxide, carbon dioxide

Materials to Avoid: Strong acid, strong bases and oxidising agents

Conditions to Avoid: Avoid direct heat. Protect from frost

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No test data available. Information on ingredients below:

Dicamba (≥97%): Median lethal dose Oral, LD50 1581 mg/kg (Rat).
Median lethal dose Dermal, LD50 >2000 mg/kg (Rat)
Median lethal concentration Inhalation, LC50 4.46 mg/l, 4h, (Rat)

Mecoprop-P (600g/l AI): Median lethal dose Oral, LD50 500-2000 mg/kg (Rat).
Harmful if swallowed
Median lethal dose Dermal, LD50 >2000 ml/kg (Rat)
Median lethal concentration Inhalation, LC50 >5.4 mg/l, (Rat)

Potassium Hydroxide: Median lethal dose Oral, LD50 273 mg/kg (Rat). Strong caustic effect

Corrosion/Irritation: No test data available. Information on ingredients below:

On the skin: Dicamba: Mildly irritating
Potassium hydroxide: Strong caustic effect
Mecoprop-p: There may be irritation and redness at the site of contact

On the eye: Dicamba: Severely irritating
Mecoprop-P: There may be irritation and redness. The eyes may water profusely
Potassium hydroxide: Strong caustic effect



Respiratory or Skin Sensitization: No test data available. Information on ingredients below:
Dicamba: Not sensitizing

Long Term Toxicity: No test data available. Information on ingredients below:
Dicamba: This product is not known to be mutagenic, carcinogenic or toxic to reproduction and development

STOT- repeated exposure: No test data available. Information on ingredients below:
Dicamba: This product is not known to be toxic in repeat doses

12. ECOLOGICAL INFORMATION

Toxicity : Toxic to aquatic organisms. Information on ingredients below:

- **Toxicity To Fish:**
Dicamba: LC₅₀ Oncorhynchus mykiss (Rainbow trout), 135.4 mg/l, 96h
Mecoprop-P: LC₅₀ Rainbow trout, >100 mg/l, 96h
Potassium Hydroxide: LC₅₀ Gambusia affinis, 80mg/l, 96h
- **Toxicity To Aquatic Invertebrates:**
Dicamba: EC₅₀ Daphnia magna (water flea), 110.7 mg/l, 48h
Mecoprop-P: EC₅₀ Daphnia magna (water flea), >91 mg/l, 48h
- **Toxicity To Aquatic Plants:**
Dicamba: EbC₅₀ Anabaena flos-aquae (Bluegreen algae), 43.1 mg/l, 72 h
Mecoprop-P: ErC₅₀ Pseudokirchneriella subcapitata, 16.2 mg/l, 72 h or 96h
ErC₅₀ Lemna minor, 1.6 mg/l, 72h or 96h
- **Toxicity To Bacteria:** **Dicamba:** IC₅₀ activated sewage sludge >500mg/l, 3h

Mobility:
Dicamba: Very high mobility in soil
Mecoprop-P: Fairly mobile but rapidly degraded in aerobic soils
Potassium Hydroxide: Slightly hazardous for water. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system

Persistence & Degradability: **Dicamba:** Not readily biodegradable. No persistent in water: degradation half life 35-46 d. No persistent in soil: degradation half life 1.4-11d
Mecoprop-P: Rapidly biodegradable
Potassium Hydroxide: Not applicable to inorganic substances

Bio-accumulative Potential: **Dicamba:** Potential for bioaccumulation is low
Mecoprop-P: Potential for bioaccumulation is low based on log P_{ow}
Potassium Hydroxide: Accumulation in organisms is not expected

Results of PBT and vPvB assessment: Ingredients not identified as PBT nor vPvB substances



13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose at licensed waste disposal site capable of accepting pesticides in compliance with applicable regulations.

Contaminated Packaging: Empty remaining contents. Triple rinse containers. The rinse water should be added to the final spray solution. It must not be put down the drain, sink or toilet. Completely empty containers can be put in the bin or disposed of in compliance with applicable local regulations.

14. TRANSPORT INFORMATION

Land Transport (ADR /RID) Not dangerous goods

Sea Transport (IMDG) Not dangerous goods

Air Transport (IATA-DGR) Not dangerous goods

None special precautions for user

15. REGULATORY INFORMATION

Registration Numbers: MAPP 16848
PCS 05323

Contains: Potassium salt of CMPP-P and Dicamba

16. OTHER INFORMATION

Recommended uses and restrictions: Follow the instructions

Full texts of abbreviated H Statements refer to under Section 3:

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



Full texts of abbreviated R phrases refer to under Section 3:

R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R35	Causes severe burns
R41	Risk of serious damage to eyes
R51/53	Toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment

Full text of Classifications

- **CLP/GHS:** Acute Tox 4; Acute Toxicity, Category 4
Aquatic Chr 2; Aquatic Chronic Toxicity, Category 2
Eye Dam 1; Eye Damage, Category 1
Skin Corr 1A; Skin Corrosion, Category 1A
- **DSD/DPD:** Xn; Harmful
Xi; Irritant
C; Corrosive
N; Dangerous for the environment

Abbreviations and Acronyms

ADR	International Carriage of Dangerous Goods by Road
CAS No	Chemicals Abstract Service Registry Number
Directive 67/548/EEC	Dangerous Substances Directive (DSD)
EC No	European Community Number for chemicals within EU regulations
IATA-DGR	Dangerous Goods Regulations by the International Air Transport Association
IMDG Code	International Maritime Dangerous Goods Code
PBT	Persistent, Bioaccumulative and Toxic Properties
Regulation (EC) No 1272/2008	Classification, Labelling and Packaging (CLP)
RID	International Transport of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative Properties

Further information

Before using this product, ensure that you read and understand its label

MSDS information:

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 453/2010.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. Individuals handling this product should be informed under COSHH of the recommended safety precautions and should have access to this information. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Westland Horticulture Limited does not accept responsibility for damage caused by incorrect use of this information.

Training and related advice:

This document contains important information to ensure the safe storage, handling and use of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to the end user and that all necessary training to enable the product to be used correctly has been given.

For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.