



SAFETY DATA SHEET
GREENFORCE LAWN WEEDKILLER

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Revision No: 1

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

1.1 Product identifier

Product Name: Greenforce Lawn Weedkiller
Product Number(s):

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

Controls all major lawn weeds

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

2.2 Label elements

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

Hazard pictogram: Not Classified

Signal words: 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 to a household waste recycling centre as hazardous waste except for empty containers which can be disposed of in the dustbin. Contact your local council for details.

2.3 Other hazards

Not available

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	1-10%
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	0-5%
Potassium hydroxide	CAS No: 1310-58-3 EINECS: 215-181-3 REACH:	H302 Acute Tox. 4 H314 Skin Corr. 1A	0-0.5%

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

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

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

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

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/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 Measures:

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:

(9.6 – 11.5)

Specific Gravity:	1.030 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

Section 11: Toxicological information

11.1 Information on toxicological effects

CMPP-P K 600 g/l AI

Acute Toxicity:

Ingestion:

LD₅₀/oral/rat = 500-2000 mg/kg. Harmful if swallowed

Skin Contact:

LD₅₀/dermal/rat > 2000 mg/kg

Inhalation:

LC₅₀/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: LD₅₀/oral/rat 1879 mg/kg
LD₅₀/dermal/rat >2000 mg/kg
LC₅₀/inhalation/4h/rat 5.19 mg/l air

Eye Irritation: Severely irritating
Skin Irritation: Mildly irritating
Sensitization: Not skin sensitising
**Mutagenic/Carcinogenic/
Teratogenicity/Reproductive/STOT:** Negative

Potassium Hydroxide

Toxicity: LD₅₀/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/
Teratogenicity/Reproductive/STOT:** No data available

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 AI

Ecotoxicity:

Algae 72 h; IC₅₀: 204 mg/l (MCP-p-DMA)

Daphnia 48 h; EC₅₀: 272 mg/l (MCP-p DMA)

Fish Rainbow Trout 96 h; LC₅₀: 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 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 inhaled
H411	Toxic to aquatic life with long lasting effects
H315	Causes skin irritation
H412	Harmful to aquatic life with long lasting effects

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