

PRODUCT SAFETY DATA SHEET

BUTOXONE

1. Identification of the Product and the Company:

Product Name: BUTOXONE

A herbicide for use in agriculture and horticulture

Marketed by:

Headland Agrochemicals Ltd.

Contact Points:

In all cases of emergency and for further advice, contact

Headland Agrochemicals Ltd

Rectors Lane

Pentre

Deeside

Flintshire CH5 2DH

Tel: +44(0)1244 537370

Fax: +44(0)1244 532097

E-Mail: enquiry@headlandgroup.com

2. Hazards:

Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. EU Classification Xn (Harmful)

3. Composition:

Ingredient	CAS No	Conc'n	Class'n	Risk Phrases
MCPB	6062-26-6	38.1% w/w	Xn	R22, R50/53

4. First Aid Measures:

Eyes: Irrigate gently with clean water for at least 15 minutes. Seek medical advice without delay.

Skin: Remove contaminated clothing. Wash thoroughly with soap and water.

Seek medical attention if any irritation or redness persists.

Ingestion: DO NOT induce vomiting. Rinse out mouth and give plenty of water to drink provided patient is conscious.

Keep patient at rest and obtain medical attention/send to hospital as soon as possible.

Inhalation: Remove from exposure and provide maximum ventilation.

Guide to

Doctors: There is no specific antidote to this product. Treatment should be symptomatic and supportive.

5. Fire Fighting Measures

Butoxone will not burn. If involved in a fire, decomposition fumes and vapours will be toxic and may include hydrogen chloride, chlorine and oxides of carbon. Fire fighters should wear breathing apparatus.

Use dry chemical, foam, water spray, carbon dioxide, sand or earth. Avoid high pressure/high volume water jets. Prevent entry of the product or contaminated water into watercourses ditches or drains by bunding the area with sand or earth if possible.

6. † Accidental Release (Spillage)

Wear suitable protective clothing (see Section 8). Remove contaminated clothing immediately. Do not eat drink or smoke. Keep bystanders away. Absorb small quantities onto a suitable absorbent (sand, silica gel, universal binder or earth). Transfer to a labelled container for later removal to a safe place for disposal.

Prevent the spillage from entering watercourses sewers or drains. Inform the authorities if contamination of waterways, sewers or drains is threatened or occurs.

7. Storage and Handling

Keep in original container, tightly closed.

Keep cool and dry in a suitable agricultural chemical store under lock and key.

Keep away from food, drink and animal feedingstuffs and out of reach of children. Protect from frost.

Avoid contact with skin, eyes or clothing. Avoid breathing vapours.

8. Personal Protection

Wear coveralls, suitable protective gloves (PVC or nitrile rubber) and face-shield to BS2092 when handling the concentrated product or contaminated surfaces and dealing with spillages. Wear suitable respiratory equipment in cases of insufficient ventilation. Avoid contact with skin, eyes and clothing and avoid breathing the spray mist when using.

Decontaminate all personal protective equipment thoroughly after use..

Occupational Exposure Limits: None assigned

9. Physical and Chemical Properties

Appearance: a dark brown liquid

Odour: characteristic, slight phenolic odour

Vapour pressure: Negligible

Solubility: Completely miscible in water

Specific Gravity: 1.14

pH: 9.6

Flashpoint: Does not flash

Partition coefficient: LogPow = 1.32

Viscosity (dynamic): 52 mPa.s

10. † Stability and Reactivity

Stability: Very stable. Stores for at least 2 years in original containers in normal agricultural chemical storage conditions.

Reactivity: no data available.

Decomposition: may generate oxides of carbon and hydrogen chloride if heated to decomposition.

11. Toxicological Information

Acute Toxicity:

Acute oral LD50:	>500 mg/kg.bw (rat)
Acute dermal LD50:	>2000 mg/kg.bw (rat)
Inhalation LC50:	No data available
Irritancy:	Severe skin irritant. Risk of serious damage to eyes.
Sensitisation:	Not a sensitiser

12. † Environmental Protection

Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Do not contaminate surface waters or ditches with chemical or used container.

LC50 (96 hour): Rainbow trout 3.9 mg.ai/litre

LC50 (48 hour): *Daphnia* 50.1 mg.ai/litre

EC50 (72 hour): Algae 1.5 mg.ai/l

EC50 (17 days): Duckweed (*Lemna gibba*) 37 mg.ai/l

Behaviour in soils: Rapidly degraded in soils (dt50=6.8 days). Low bioaccumulation potential (based on log Pow)

Mobility in soils:

Koc = 86-130; 1/n = 0.74-0.898 (MCPB, pH <7)

Koc = 31-48; 1/n = 0.898-0.995 (MCPB, pH >7)

PBT/vPvB assessment: This product contains no substances considered to be persistent, bioaccumulating or toxic.

13. Disposal of Unwanted Product and Used Containers

Consult the local authorities before disposing of unwanted chemical. It is recommended that the chemical is mixed with a combustible solvent and burned in a chemical incinerator equipped with an afterburner and scrubber. Triple-rinse and puncture used containers and dispose of as permitted by local authorities. Do not re-use containers for any purpose.

14. † Transport Information

Road Transport:	n/a
UN Number:	n/a
Proper Shipping Name:	n/a
UN Class:	n/a
CPL Packing Group:	n/a
ADR/RID Description:	n/a
IMDG Class:	n/a

15. Regulatory Information

Hazard Symbols: Harmful Xn, Dangerous for the Environment N

Risk Phrases:

R22 Harmful if swallowed

R38 Irritating to skin

R41 Risk of serious damage to eyes

R51	Toxic to aquatic organisms
R53	May cause long-term adverse effects in the aquatic environment
Safety Phrases:	
S2	Keep out of reach of children
S13	Keep away from food, drink and animal feedingstuffs
S20/21	When using do not eat, drink or smoke
S24/25	Avoid contact with skin and eyes
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S37/39	Wear suitable gloves and eye/face protection
S46	If swallowed, seek medical advice immediately and show this container or label
S57	Use appropriate containment to avoid environmental contamination

16. Other Information

The above information is intended to give health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the use of the product, for which purpose the product label and any appropriate technical usage literature available should be consulted and any relevant licences, consents or approvals complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate to the best of the issuer's available knowledge at the date of publication, and will be updated as and when appropriate. No liability will be accepted for any loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

Butoxone is approved by the Chemicals Regulation Directorate for use as a herbicide. Registration No. MAPP 14406

Headland is a registered trade mark.

Butoxone is a registered trade mark and product of Nufarm Ltd.

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