

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

1.1. Product identifier

Product name: HERBOXONE

Product code: 10229

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

Use of substance / mixture: Can be used as herbicide only.

1.3. Details of the supplier of the safety data sheet

Company name: Headland Agrochemicals

Rectors Lane

Pentre

Flintshire

CH5 2DH

United Kingdom

Tel: +44(0)1244 537370

Fax: +44(0)1244 532097

Email: flintshire.enquiry@fmc.com

1.4. Emergency telephone number

Emergency tel: +44(0)1244 537370

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Xn: R22; Xi: R41; N: R50/53

Classification under CLP: * Acute Tox. 4: H302; Eye Dam. 1: H318; -: EUH208; -: EUH401

Most important adverse effects: Harmful if swallowed. Risk of serious damage to eyes. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements:

Hazard statements: * H302: Harmful if swallowed.

H318: Causes serious eye damage.

EUH208: Contains 2,4-D. May produce an allergic reaction.

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

Signal words: * Danger

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Hazard pictograms: * GHS05: Corrosion
GHS07: Exclamation mark



Precautionary statements: * P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+312: IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell.
P330: Rinse mouth.
P501: Dispose of contents/container to hazardous or special waste collection point.

Label elements under CHIP:

Hazard symbols: Harmful.
Dangerous for the environment.



Risk phrases: R22: Harmful if swallowed.
R41: Risk of serious damage to eyes.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S35: This material and its container must be disposed of in a safe way.
S39: Wear eye / face protection.
S57: Use appropriate container to avoid environmental contamination.

Precautionary phrases: To avoid risks to man and the environment, comply with the instructions for use.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

[cont...]

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2,4-D (ISO)

EINECS	CAS	CHIP Classification	CLP Classification	Percent
202-361-1	94-75-7	Xn: R22; Xi: R37; Xi: R41; Sens.: R43; -: R52/53	Acute Tox. 4: H302; STOT SE 3: H335; Eye Dam. 1: H318; Skin Sens. 1: H317; Aquatic Chronic 3: H412	30-50%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor if irritation develops.

Eye contact: * Bathe the eye with running water for 15 minutes. Remove contact lenses, if present, after the first few minutes, then continue rinsing. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be mild irritation at the site of contact.

Eye contact: * There may be pain and redness. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting and diarrhoea.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: * Eye bathing equipment should be available on the premises. Immediate medical attention is required in case of ingestion or eye contact. Show this safety data sheet to the doctor in attendance.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: * Water spray. Dry chemical powder. Sand. Foam. Carbon dioxide. Do not use high volume water jet. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: * In the event of fire (HCL, CL₂, NO_x, CO) may be formed.

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5.3. Advice for fire-fighters

Advice for fire-fighters: * Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes. Contaminated fire extinguishing water should not be discharged into drains, if preventable.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: * Refer to section 8 of SDS for personal protection details. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. In the case of large spills (1 ton or more), alert the appropriate authorities.

6.2. Environmental precautions

Environmental precautions: * Do not discharge into drains or rivers. Contain the spillage using bunding. Accidental release into water courses must be alerted to the appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Refer to section 13 of SDS for suitable method of disposal.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: * Avoid direct contact with the substance. Avoid the formation or spread of mists in the air. For its use as a pesticide, look for precautions and personal protective measures on the officially approved label or other official guidance or policy in force. If these are lacking, see section 8 of this SDS.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: * Protect from frost. Store in a cool, well ventilated area. Keep container tightly closed. Keep out of the reach of children. Keep away from food, drink and animal feedstuffs.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

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Hazardous ingredients:

2,4-D (ISO)

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	10 mg/m ³	20 mg/m ³	-	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: * In the event of a discharge of the material which produces a heavy vapour or mist, workers must put on officially approved respiratory protection equipment with a universal filter type including particle filter.

Hand protection: PVC gloves. Nitrile gloves.

Eye protection: * Face-shield. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: Refer to specific Member State legislation for requirements under Community environmental legislation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Yellow

Odour: Amine-like.

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

Viscosity: 13.9 mPa.s

Flash point°C: >200

Autoflammability°C: >600

Relative density: 1.173 g/cm³

pH: 7.7

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

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10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong bases. Strong acids. Strong oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes. See subsection 5.2.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
INHALATION	RAT	LD50	>5.01	mg/l
DERMAL	RAT	LD50	>4000	mg/kg
ORAL	RAT	LD50	1297	mg/kg

Hazardous ingredients:

2,4-D (ISO)

DERMAL	RAT	LD50	1500	mg/kg
ORAL	MUS	LD50	347	mg/kg
ORAL	RAT	LD50	375	mg/kg

Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (harmful)	ING	Based on test data
Irritation	OPT	Based on test data

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: * There may be pain and redness. The eyes may water profusely. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting and diarrhoea.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

[cont...]

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Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
DUCKWEED (Lemna gibba)	14d EC50	1.36	mg/l
ALGAE (Navicula pelliculosa)	120H EC50	12.4	mg/l
ALGAE (Selenastrum capricornutum)	93.5H EC50	1100	mg/l
ALGAE	72H EbC50	177	mg/l
DAPHNIDS (Daphnia magna)	48H EC50	>200	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	>200	mg/l

12.2. Persistence and degradability

Persistence and degradability: * 2,4-D: DT50(soil) = 13.6 days.

12.3. Bioaccumulative potential

Bioaccumulative potential: * Not expected to bioaccumulate.

12.4. Mobility in soil

Mobility: * 2,4-D: Koc = 5 - 212.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: * Dispose of product and packaging in accordance with The Green Code (the Code of Practice for the safe use of pesticides on farms and holdings), a MAFF publication.

Waste code number: 02 01 08

Disposal of packaging: Do not re-use empty containers. Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: N/A

14.2. UN proper shipping name

Shipping name: NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

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14.3. Transport hazard class(es)

Transport class: N/A

14.4. Packing group

Packing group: N/A

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk: The product is not transported in bulk tankers.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Product Registration Number: MAPP 13958.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: EUH208: Contains <name of sensitising substance>. May produce an allergic reaction.
EUH401: To avoid risks to human health and the environment, comply with the instructions for use.
H302: Harmful if swallowed.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.
H412: Harmful to aquatic life with long lasting effects.
R22: Harmful if swallowed.
R37: Irritating to respiratory system.
R41: Risk of serious damage to eyes.
R43: May cause sensitisation by skin contact.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

[cont...]

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R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.