

Section 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Product Name: Optica
Product Number(s): P4445 (5L), G4446 (10L)

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

Controls many weeds in cereals and amenity grasslands

1.3 Details of the supplier of the safety data sheet

Hygeia Chemicals Limited, Carrowmoneash, Oranmore, Co. Galway
Tel: 091-794722 Fax: 091-794738 email: services@hygeia.ie

1.4 Emergency telephone number

National Poisons Information Centre (Tel: 01-8379964) (Fax: 01-8368476)

Section 2: Hazards Identification**2.1 Classification according to Regulation (EC) 1272/2008 [EU-GHS/CLP]**

Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Dam. 1: H318; -: EUH401
Harmful if swallowed. Causes skin irritation. Causes serious eye damage. To avoid risks to human health and the environment, comply with the instructions for use

2.2 Label Elements**Labelling according to Regulation (EC) No 1272/2008 (CLP):**

Hazard pictogram: GHS05: Corrosive GHS07: Exclamation Mark

Signal words: Danger

Hazard statements: H302: Harmful if swallowed
H315: Causes skin irritation
H318: Causes serious eye damage
EUH401: To avoid risks to human health and the environment, comply with the instructions for use

Precautionary Statements: P280: Wear protective gloves/protective clothing/eye protection/face protection
P301+312: IF SWALLOWED: Call a POISON CENTRE/Doctor/if you feel unwell
P330: Rinse mouth
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P302+352: IF ON SKIN: Wash with plenty of water
P332+313: If skin irritation occurs: Get medical advice/attention

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)-2-(4-Chloro-2-Methylphenoxy) Propionic Acid, Potassium Salt	CAS No: 66423-05-0 EINECS: 240-539-0	Acute Tox.4: H302; Eye Dam. 1: H318; Aquatic Chronic 2: H411	61.400%
EDTA	CAS No: 60-00-4 EINECS: 200-449-4	Acute Tox. 4: H332; Eye Irrit. 2: H319	1.500%

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. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor

Eye Contact: Bathe the eye with running water for 15 minutes. Consult a doctor

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor

4.2 Most important symptoms and effects, both acute and delayed

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 can be expected after short-term exposure

Immediate Effects:

4.3 Indication of any immediate medical attention and special treatment needed

Eye bathing equipment should be available on the premises

Section 5: Firefighting Measures

5.1 Extinguishing media

Extinguish with carbon dioxide, dry chemical, foam or water spray. Use water spray to cool containers

5.2 Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes

5.3 Advice for firefighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes

Section 6: Accidental Release Measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
Refer to Section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. 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
- 6.2 Environmental precautions**
Do not discharge into drains or rivers. Contain the spillage using bunding
- 6.3 Methods and material for containment and cleaning up**
Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method
- 6.4 Reference to other sections**
Refer to Section 8 of SDS

Section 7: Handling and Storage

- 7.1 Precautions for safe handling**
Avoid direct contact with substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air
- 7.2 Conditions for safe storage, including any incompatibilities**
Store in a cool, well ventilated area. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids
- 7.3 Specific end use(s)**
No data available

Section 8: Exposure Controls/Personal Protection**8.1 Control Parameters****(R)-2-(4-Chloro-2-Methylphenoxy) Propionic Acid, Potassium Salt**

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

DNEL/PNEC Values: No data available

8.2 Exposure Controls

Engineering Control Measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids

Respiratory Protection: Self-contained breathing apparatus must be available in case of emergency

Hand Protection: Impermeable gloves

Eye Protection: Safety glasses. Ensure eye bath is to hand

Skin Protection: Impermeable protective clothing

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Brown liquid
Odour:	Phenolic
pH:	8.5 - 9.5
Specific Gravity:	1.200 - 1.300 g/ml @ 20°C
Boiling Point:	>100°C
Melting Point/Range:	No data available
Decomposition Temp.:	No data available
Flash Point:	>100°C
Auto Ignition Temp.:	No data available
Flammability:	Not flammable
Explosive Properties:	Not explosive
Oxidising Properties:	Non-oxidising (by EC criteria)
Vapour Pressure:	No data available
Bulk Density:	Not applicable
Solubility (Water):	Soluble
Solubility (Fat Solvent):	No data available
Partition Coefficient:	n-Octanol/Water -0.391 (MCP-p Acid)
Viscosity:	48.3mPas

9.2 Other information

No data available

Section 10: Stability and Reactivity

10.1 Reactivity

Stable under recommended transport or storage conditions

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of 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

Exothermic reaction with strong acids

10.5 Incompatible materials

Oxidising agents. Strong acids. Strong bases

10.6 Hazardous decomposition products

In combustion emits toxic fumes

Section 11: Toxicological Information

11.1 Information on toxicological effects

Toxicity Values:

Route	Species	Test	Value	Units
Eye damage	Rabbit	-	Severe	-
IHL	Rat	LC ₅₀	>5.4	mg/l
ORL	Rat	LD ₅₀	500-2000	mg/kg
SKN	Rat	LD ₅₀	>2000	ml/kg
Skin corrosion	Rabbit	-	Irritant	-

Relevant Hazards for Substance:

Effect	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Based on test data
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data

Excluded Hazards for Substance:

Hazard	Route	Basis
Respiratory/skin sensitisation	-	Based on available data the classification criteria are not met
Germ cell mutagenicity	-	Based on available data the classification criteria are not met
Carcinogenicity	-	Based on available data the classification criteria are not met
Reproductive toxicity	-	Based on available data the classification criteria are not met

Symptoms/Routes of Exposure:

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

Section12: Ecological Information**12.1 Ecotoxicity Values:**

Species	Test	Value	Units
Daphnia magna	NOEC	22.2	mg/l (MCP-p)
Lemna minor	72h or 96h ErC ₅₀	1.6	mg/l (MCP-p)
Pseudokirchneriella subcapitata	72h or 96h ErC ₅₀	16.2	mg/l (MCP-p)
Rainbow Trout (Oncorhynchus mykiss)	96h LC ₅₀	>100	mg/l (MCP-p)
Rainbow Trout (Oncorhynchus mykiss)	NOEC	>50	mg/l (MCP-p)
Daphnia magna	48h EC ₅₀	>91	mg/l (MCP-p)

12.2 Persistence & Degradability

Readily 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 product is not identified as a PBT/vPvB 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

H315 Causes skin irritation

H318 Causes serious eye damage

H319 Causes serious eye irritation

H332 Harmful if inhaled

H411 Toxic to aquatic life with long lasting effects

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, release and is not to be considered a warranty of quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text