SAFETY DATA SHEET
Darby

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

1.1. Product identifier

Product name Darby

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

Identified uses Herbicide

1.3. Details of the supplier of the safety data sheet

Supplier

Barclay Chemicals Manufacturing Ltd.
Damastown Industrial Park
Damastown Way
Mulhuddart
Dublin 15
+353 1 811 29 00
info@barclay.ie

1.4. Emergency telephone number

National emergency telephone number NHS dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Eye Dam. 1 - H318

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms

Signal word Danger

Hazard statements

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H410 Very toxic to aquatic life with long lasting effects.

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Precautionary statements	P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/ doctor. P330 Rinse mouth. P391 Collect spillage. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH401 To avoid risks to human health and the environment, comply with the instructions for use. EUH208 Contains (2,4-DICHLOROPHENOXY)ACETIC ACID, DIMETHYLAMINE SALT. May produce an allergic reaction.
Contains	(2,4-DICHLOROPHENOXY)ACETIC ACID, DIMETHYLAMINE SALT

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

(2,4-DICHLOROPHENOXY)ACETIC ACID, DIMETHYLAMINE SALT CAS number: 2008-39-1	**30-60%**
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical advice/attention if you feel unwell.
Inhalation	Remove person to fresh air and keep comfortable for breathing.
Ingestion	Rinse mouth. Get medical attention if any discomfort continues.
Skin contact	Wash with plenty of water.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

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

Inhalation	May cause coughing and difficulties in breathing.
Ingestion	May cause stomach pain or vomiting. Nausea, vomiting.
Skin contact	Causes mild skin irritation.
Eye contact	Causes serious eye damage.

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

Specific treatments	Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray, foam, dry powder or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products May be released in case of fire: Toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Do not attempt to take action without suitable protective equipment Self-contained breathing apparatus Complete protective clothing

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Ventilate spillage area Avoid contact with skin and eyes

For emergency responders Do not attempt to take action without suitable protective equipment For further information refer to section 8: "Exposure controls/personal protection"

6.2. Environmental precautions

Environmental precautions Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with sand or other inert absorbent. Take up liquid spill into absorbent material. Dispose of contents/container in accordance with local regulations.

6.4. Reference to other sections

Reference to other sections For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid contact with skin and eyes. Wear protective clothing.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well-ventilated place. Keep away from combustible materials.

7.3. Specific end use(s)

Usage description Herbicide

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment

Darby

Appropriate engineering controls	Provide adequate ventilation.
Eye/face protection	Tight-fitting safety glasses.
Hand protection	Wear protective gloves.
Other skin and body protection	Wear protective clothing.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Avoid release to the environment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Brown.
Odour	Amine.
pH	8.0-8.3 (100%, 20 ºC ± 1 ºC); 7.2-7.5 (1% w/v , 20 ºC ± 1 ºC)
Initial boiling point and range	>100°C
Flash point	> 200°C
Relative density	1.166 - 1.171 @ 20°C +- 1°C
Solubility(ies)	Miscible with water.
Partition coefficient	log Pow: -0.82 @ pH7
Auto-ignition temperature	> 600°C
Viscosity	13.9 cP @ 20°C
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid No specific requirements are anticipated under normal conditions of use. Avoid heat.

10.5. Incompatible materials

Materials to avoid Oxidising agents. Strong acids.

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10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 1,297.0

Species Rat

ATE oral (mg/kg) 1,297.0

SECTION 12: Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hours: > 200 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC_{50}, 48 hours: > 200 mg/l, Daphnia magna

Acute toxicity - aquatic plants ErC50, 7 days: 44 mg/l, Lemna Minor
ErC50, 14 days: 0.715 mg/l, Myriophyllum spicatum
ErC10, 14 days: 0.178 mg/l, Myriophyllum spicatum
EC_{50}, 72 hours: > 100 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - terrestrial LC_{50}, : > 1000 mg/kg soil, Eisenia Fetida (Earthworm)
LD50, Oral 96 hours: > 100 µg prod./bee, Apis Mellifera (Honeybee)
LD50, Contact 96 hours: > 200 µg prod./bee, Apis Mellifera (Honeybee)

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 32 days: 63.4 mg/l, Pimephales promelas (Fat-head Minnow)

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 46.2 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Biodegradation - DT_{50} : 2 - 58.9 days

12.3. Bioaccumulative potential

Bioaccumulative potential No potential for bioaccumulation.

Partition coefficient log Pow: -0.82 @ pH7

12.4. Mobility in soil

Mobility Mobile.

Adsorption/desorption coefficient Soil - Koc: 12 - 382 @ /°C

12.5. Results of PBT and vPvB assessment

Darby

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of contents/container in accordance with local regulations.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS (2,4-DICHLOROPHENOXY)ACETIC ACID, DIMETHYLAMINE SALT)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS (2,4-DICHLOROPHENOXY)ACETIC ACID, DIMETHYLAMINE SALT)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS (2,4-DICHLOROPHENOXY)ACETIC ACID, DIMETHYLAMINE SALT)

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS (2,4-DICHLOROPHENOXY)ACETIC ACID, DIMETHYLAMINE SALT)

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

ADR/RID label 9

IMDG class 9

ICAO class/division 9

ADN class 9

Transport labels

14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

ADN packing group III

14.5. Environmental hazards

Darby

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(-)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) 2020/878 of 18 June 2020

15.2. Chemical safety assessment

SECTION 16: Other information

Revision date	26/10/2021
Revision	5
Supersedes date	02/07/2021
SDS number	6239
Hazard statements in full	H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.