

SAFETY DATA SHEET

Barclay Avoca

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Barclay Avoca

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

Identified uses Agricultural/Horticultural Fungicide.

1.3. Details of the supplier of the safety data sheet

Manufacturer Barclay Chemicals Manufacturing Ltd,
Damastown Way
Damastown Industrial Estate
Mulhuddart
Dublin 15
Ireland
Tel: + 353 1 811 29 00
Fax: + 353 1 822 46 78
email: info@barclay.ie

1.4. Emergency telephone number

+353 86 385 77 69

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H332; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; Carc. 2 - H351; STOT SE 3 - H335
Environment	Aquatic Chronic 1 - H410

Classification (1999/45/EEC)

Xn; R20. Carc. Cat. 3; R40. Xi; R36/37. R43. N; R50/53.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Contains CHLOROTHALONIL (ISO)

Label In Accordance With (EC) No. 1272/2008



Signal Word

Warning

Hazard Statements

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P308+313	IF exposed or concerned: Get medical advice/attention.

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P337+313

If eye irritation persists: Get medical advice/attention.

P391

Collect spillage.

P501

Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

CHLOROTHALONIL (ISO)	30-60%
CAS-No.: 1897-45-6	EC No.: 217-588-1
Classification (EC 1272/2008) Acute Tox. 2 - H330 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Carc. 2 - H351 STOT SE 3 - H335 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC) Carc. Cat. 3;R40 T+;R26 Xi;R37,R41 R43 N;R50/53
SODIUM HYDROXIDE	< 1%
CAS-No.: 1310-73-2	EC No.: 215-185-5
Classification (EC 1272/2008) Skin Corr. 1A - H314	Classification (67/548/EEC) C;R35
Sulfonated Aromatic polymer, sodium salt	1-5%
CAS-No.:	EC No.:
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Remove victim immediately from source of exposure. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

Remove victim immediately from source of exposure. Immediately rinse mouth and provide fresh air. Get medical attention immediately!

Skin contact

Remove victim immediately from source of exposure. Remove contaminated clothing immediately and wash skin with soap and water.

Continue to rinse for at least 15 minutes and seek medical attention.

Eye contact

Remove victim immediately from source of exposure. Immediately flush with plenty of water. Remove any contact lenses and open eyes wide apart. Call an ambulance and continue flushing during transportation to hospital. Bring these instructions.

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

Inhalation

Sore throat. Nausea, vomiting.

Ingestion

May cause stomach pain or vomiting.

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Skin contact
Skin irritation. Allergic rash.
Eye contact
May cause severe irritation to eyes.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products
In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures
Avoid breathing fire vapours. Keep up-wind to avoid fumes. Move container from fire area if it can be done without risk. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.
Protective equipment for fire-fighters
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Do not smoke, use open fire or other sources of ignition. Avoid inhalation of dust and vapours.

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. Do not discharge into drains, water courses or onto the ground. Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Clean-up personnel should use respiratory and/or liquid contact protection. Wash thoroughly after dealing with a spillage. Absorb spillage with non-combustible, absorbent material. Remove small spills with vacuum cleaner. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Inform Authorities if large amounts are involved.

6.4. Reference to other sections

For personal protection, see section 8.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Follow instructions and ensure correct dilution of this product before use.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Keep away from food, drink and animal feeding stuffs. Protect from freezing and direct sunlight. Protect against physical damage and/or friction. Store in tightly closed original container in a dry, cool and well-ventilated place. Store in closed original container at temperatures between 0°C and 30°C.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
SODIUM HYDROXIDE	WEL				2 mg/m3	

WEL = Workplace Exposure Limit.

CHLOROTHALONIL (ISO) (CAS: 1897-45-6)

Ingredient Comments

No exposure limits noted for ingredient(s).

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash, quick drench.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

Harmful by inhalation. Wear suitable respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear goggles/face shield.

Other Protection

Provide eyewash station and safety shower. Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Wash contaminated clothing before reuse. Wash hands after handling. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Skin protection

Protection suit must be worn.

Environmental Exposure Controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Opaque Liquid
Colour	White / off-white.
Odour	No characteristic odour.
Solubility	Suspension.
Relative density	1.2420 20
pH-Value, Conc. Solution	7.28
pH-Value, Diluted Solution	6.30 1
Flash point (°C)	
Scientifically unjustified.	
	This product is not flammable.
Partition Coefficient (N-Octanol/Water)	log Pow ~ 2.92
Comments	Information given concerns the concentrated solution.

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid frost. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

No incompatible groups noted. Keep in original container.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Acute Toxicity (Oral LD50)

> 2000 mg/kg

Acute Toxicity (Dermal LD50)

> 2000 mg/kg

Acute Toxicity (Inhalation LC50)

> 1.96 mg/l (dust/mist) Rat 4 hours

Carcinogenicity:

Suspected carcinogen based on limited evidence.

Inhalation

Harmful by inhalation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

Acute Fish Toxicity

Very toxic to aquatic organisms.

LC 50, 96 Hrs, Fish mg/l 0.109

EC 50, 48 Hrs, Daphnia, mg/l 0.476

IC 50, 72 Hrs, Algae, mg/l 0.676

12.2. Persistence and degradability

Degradability

The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

May accumulate in soil and water systems.

Partition coefficient

log Pow ~ 2.92

12.4. Mobility in soil

Mobility:

Semi-mobile. The product contains substances, which may accumulate in sediment.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Do not allow runoff to sewer, waterway or ground.

SECTION 14: TRANSPORT INFORMATION

Road Transport Notes	Avoid releasing to the environment.
Rail Transport Notes	Avoid releasing to the environment.
Sea Transport Notes	Do not release into the environment.

14.1. UN number

UN No. (ADR/RID/ADN)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082

14.2. UN proper shipping name

Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Contains Chlorothalonil)
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14.3. Transport hazard class(es)

ADR/RID/ADN Class	9
ADR/RID/ADN Class	Class 9: Miscellaneous dangerous substances and articles.
ADR Label No.	9
IMDG Class	9
ICAO Class/Division	9
Transport Labels	



14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS	F-A, S-F
Emergency Action Code	•3Z
Hazard No. (ADR)	90
Tunnel Restriction Code	(E)

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

Not relevant

SECTION 15: REGULATORY INFORMATION

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

EU Legislation

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date	25/04/2014
Revision	0
Risk Phrases In Full	
R35	Causes severe burns.
R20	Harmful by inhalation.
R36/37	Irritating to eyes and respiratory system.
R36/38	Irritating to eyes and skin.
R37	Irritating to respiratory system.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R41	Risk of serious damage to eyes.
R26	Very toxic by inhalation.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard Statements In Full	
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.