

SAFETY DATA SHEET

Bentazone 480

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY

1.1 Identifiers

Product name: **Bentazone 480**
Other Name(s): Soluble concentrate containing bentazone 480 g/L

1.2 Recommended use of the chemical and restrictions on use

Product Use: Selective post-emergence herbicide, for use in several crops.

1.3 Supplier contact details:

Company name: Grosafe Chemicals Limited
Address: 20 Jean Batten Drive Mt Maunganui, 3116
Telephone: 0800 220 002
Email: info@grosafe.co.nz

Emergency telephone number (24 hours) 0800 CHEMCALL (0800 243 622)

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Hazardous Chemical

Hazardous substance according to Hazardous Substances and New Organisms (HSNO) Act 1996

HSNO Substance Approval: HSR100861

Classifications: Eye irritation Category 2; Skin sensitisation Category 1; Hazardous to the aquatic environment chronic Category 3

2.2 Label elements:

Pictograms:



Signal Word: WARNING

Hazard statements:

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Additional labelling statements required under Hazardous Substances (Labelling Notice 2017)

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Do not apply directly into or onto water.

Precautionary statements:

Prevention

- P102 Keep out of reach of children.
 P103 Read label before use.
 P261 Avoid breathing vapour/mist/spray.
 P264 Wash hands and exposed skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear eye/ face protection and protective gloves.

Response

- P101 If medical advice is needed, have product container or label at hand.
 P312 Call a POISON CENTRE or doctor if you feel unwell.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P363 Take off contaminated work clothing and wash it before re-use.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 + P338
 P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage

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Disposal

- P501 Dispose of contents/container in accordance with local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Proportion % w/w
Bentazone	25057-89-0	40 - 41
Other ingredients*	Trade secret	balance

This is a commercial product whose exact ratio of components may vary slightly.

*Do not affect the hazardous classifications of the product.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General Information:

For advice call the National Poisons Centre, telephone 0800 POISON [0800 764 766] .Have label or Safety Data Sheet at hand. If exposed or concerned, get medical advice.

IF SWALLOWED: Rinse mouth with water. Call a POISONS CENTRE or doctor for advice if person feels unwell.

IF ON SKIN: . Wash with plenty of soap and water. Take off contaminated work clothing and wash it before re-use. If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISONS CENTRE or doctor for advice if person feels unwell.

4.2 Symptoms caused by exposure

Unlikely to cause harmful effects under normal conditions of handling and use.

4.3 Medical attention and special treatment

Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Use water spray or fog or foam as appropriate for surrounding materials. Contain extinguishing media to prevent runoff into drains, sewers, waterways.

5.2 Specific hazards arising from the chemical

Fire decomposition products may be toxic/harmful and/or irritating if inhaled.

Evacuate people to safe area upwind of fire.

5.3 Special protective equipment and precautions for fire fighters

Wear full personal protective equipment including with self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Have this SDS available. In the event of a spill, wear appropriate protective clothing, eye and skin protection. Wash contaminated personal protective equipment and clothing, and dry before re-use.

6.2 Environmental precautions

Prevent spillage from entering drains or waterways. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

6.3 Methods and materials for containment and cleaning up

Contain spilled material. For small liquid spills, use absorbent material and recover into labelled drums that can be sealed for safe disposal. For large liquid spills, recover liquid into labelled containers then absorb remaining liquid and transfer to drums for disposal. Clean area with water and detergent.

Dispose of contaminated materials to approved landfill in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Read the label before use.

Do not apply directly into or onto water.

Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Avoid contact with skin and eyes. Avoid inhalation of spray mist/aerosols. Wear protective equipment such as coat/trouser (overalls), boots, gloves and eye protection. Wash hands and exposed skin with soap and water after handling and before rest or meal breaks.

Do not use spray equipment contaminated with this product for any other purpose unless first thoroughly cleaned with a suitable cleaning detergent.

7.2 Conditions for safe storage

Store securely in the closed original packaging out of reach of children and in a dry, cool, well-ventilated area and out of direct sunlight. Keep away from food, drink and animal feedstuffs.

Storage of 1000L or more of this product requires an emergency response plan, secondary containment and signage.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters – exposure standards, biological monitoring

Ingredient	TWA (mg/m ³)	STEL (mg/m ³)
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No biological limits applicable.

8.2 Engineering controls

Use in well-ventilated area or outdoors.

8.3 Personal protective equipment (PPE)

The following Standards provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Eye/Face Protection: Wear chemical splash goggles if eye contact is possible.

Skin Protection: Wear impervious chemical resistant gloves (e.g. nitrile, butyl), coveralls, socks and chemical resistant footwear. For overhead spray exposure, wear chemical resistant headgear. Ensure all skin areas are covered.

Respirator: Use outdoors in well-ventilated area or use local exhaust ventilation. Where product is being sprayed and a mist could be produced a respirator should be worn. It should be fitted with a cartridge, suitable for particulates.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear yellow/brown liquid
Odour	Mild
Odour threshold	Not known
pH	6.5 – 9.5
Melting/Freezing Point	No data available
Boiling Point /Range	>100 °C
Flash point	Non flammable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Not applicable
Vapour Pressure	No data available
Vapour density	No data available
Specific gravity	ca 1.19
Solubility	Soluble in water
Partition Co-efficient n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Not applicable
Particle characteristics	Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

This product is unlikely to react or decompose under normal storage conditions.

10.2 Chemical stability

Stable under normal temperatures and pressure for storage and use.

10.3 Conditions to Avoid

Contact with oxidising agents.

10.4 Incompatible materials and possible hazardous reactions

None identified. Hazardous decomposition products may be formed at high temperatures.

10.5 Hazardous decomposition products

Fire Decomposition: Sulphur and nitrogen oxides.

10.6 Polymerisation

Not known to occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Health hazard information

The product is classified for health hazards according to an assessment of information on product.

11.2 Toxicological information

Acute toxicity:	Not classified as acutely toxic.
Aspiration hazard:	Product is not classified with aspiration hazard.
Respiratory irritation:	Not specific classification.
Skin corrosion/irritation	Not classified as irritant.
Serious eye damage/irritation	Classified as serious eye irritant.
Respiratory or skin sensitisation	Bentazone is classified as a contact sensitizer,
Germ cell mutagenicity:	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity – single/repeated exposure	Not classified
Narcotic effects	Product contains no ingredient identified as causing narcotic effects.

11.3 Toxicological data:

Product	Not available
Bentazone	Oral, mouse LD ₅₀ 400 mg/kg b.w Dermal, rat LD ₅₀ 2500 mg/kg b.w. Inhalation, rat LC ₅₀ (4 hr) >5.1 mg/L

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

This product is classified as being harmful to aquatic life with long lasting effects.

12.2 Environmental Fate

Breakdown in soil and groundwater: Not rapidly biodegradable.



Bioaccumulation: Bentazone is bioaccumulative. $\text{LogP}_{\text{OW}} = 5.84$

Partition coefficient (octanol/water): Not available.

Soil mobility: Bentazone 570 mg/L @20°C

12.3 Ecotoxicity data:

Bentazone	Fish; rainbow trout, bluegill sunfish LC_{50} (96 hr) >100 mg/L
	Algae, green: EC_{50} (72 hr) 47.3 mg/L
	Bobwhite quail: Oral LD_{50} 1140 mg/kg
	Worms; EC_{50} (14d) >1000 mg/kg soil

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product Disposal

Refer to product label. If possible, dispose of by using according to the label.

Otherwise

dispose of to an approved landfill in accordance with local regulations.

13.2 Container Disposal

Refer to product label. Do not use packaging for storage of other products. Empty packaging should be disposed of to an approved recycler or crushed and sent to approved landfill.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport:

Not classified as Dangerous Good according to NZS5433 Transport of Dangerous Goods on Land

Marine Transport (IMO/IMDG):

Not Classified as Dangerous Good by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):

Not Classified as Dangerous Good by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulation for transport by air.

UN Number: Non- regulated

UN Proper Shipping Name:

Transport hazard class(es)

Packing Group:

HAZCHEM:

Special Precautions for User:

IMDG Marine pollutant:

Transport in Bulk: -

SECTION 15: REGULATORY INFORMATION

15.1 HSNO Act 1996

Hazardous substance according to Hazardous Substances (Hazard Classification) Notice 2020.

Approved substance number: HSR100861

Hazardous classifications: Eye irritation Category 2; Skin sensitisation Category 1; Hazardous to the aquatic environment chronic Category 3

Controls: Refer to control on www.epa.govt.nz for complete wording for variation Controls.

	77A Do not apply directly onto or into water.
Additional information:	Refer to HS Notices (www.epa.govt.nz) and HSW HS Regulations (www.worksafe.govt.nz)
Certified Handler:	Not applicable
Tracking:	Not applicable
International Agreements:	Not applicable

15.2 ACVM Act 1997

Registration number: P9033 Bentazone 480
Refer to www.foodsafety.govt.nz for registration conditions.

SECTION 16: OTHER INFORMATION

16.1 Date of preparation or last revision of SDS

SDS issued	08 August 2023
SDS supersedes	July 2020
Reason issued	Update to GHS.

16.2 ABBREVIATIONS

ADI	Acceptable Daily Intakes
CAS number	Chemical Abstracts Service Registry Number
CCID	Chemical Classification Identification Database
EPA	Environmental Protection Authority
ErC₅₀	Half maximal Effective Concentration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSNO	Hazardous Substances and New Organisms
HS	Health and Safety
HSR	Hazardous Substances Register
IARC	International Agency for Research on Cancer
LC₅₀	Median Lethal Concentration
LD₅₀	Median Lethal Dose
SDS	Safety Data Sheets
NOAEL	No Observable Adverse Effect Level
NOEL	No Observable Effect Level
NOS	Not otherwise specified
STEL	Short Term Exposure Limit
SWA	Safety Work Australia
TWA	Time-Weighted Average
UN Number	United Nations Number

16.3 REFERENCES

EPA CCID and Approved Substance databases
PPDB- Pesticides Properties DataBase

16.4 OTHER

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End of Safety Data Sheet