



SAFETY DATA SHEET BROADSTAR® HERBICIDE

Section 1: Identification of the Substance and Supplier

Product name: BROADSTAR 480SC HERBICIDE
Chemical name: Bentazone is a thiazole derivative.

Supplier: ADAMA NEW ZEALAND LIMITED
Level1/19 Elms Street, Wakatu Estate, Stoke, Nelson, New Zealand
P.O. Box 1799, Nelson New Zealand.

Telephone +64 3 543 8275 Fax: +64 3 543 8274

Emergency Telephone: 0800 POISON (0800 764 766)

Section 2: Hazards Identification

Hazard Classifications: 6.1D, 6.4A, 6.5B, 9.1C, 9.3C
Most important hazards: **Warning –**
May be harmful if swallowed, inhaled or absorbed through the skin.
May cause eye irritation.
May cause sensitisation from prolonged skin contact. Avoid skin and eye contact.
ECOTOXICITY
Harmful to aquatic life with long-lasting effects.
Avoid contamination of any water supply with product or empty container.
Very toxic to the soil environment.
Harmful to terrestrial vertebrates.

Section 3. Composition/information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m ³)	STEL (mg/m ³)
Bentazone (as sodium salt)	25057-89-0	480g/L	not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible. The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

- **Occupational Exposure Limit(s), if available, are listed in section 8**

Section 4: First-Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 from anywhere in New Zealand and is available at all times. Have this MSDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.



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Section 5: Fire-Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

This product is likely to decompose only after heating to dryness, followed by further strong heating.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Not Combustible. Use extinguishing media suited to burning materials.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point:	Does not burn.
Upper Flammability Limit:	Does not burn.
Lower Flammability Limit:	Does not burn.
Autoignition temperature:	Not applicable - does not burn.
Flammability Class:	Does not burn.

Section 6: Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles.

If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the NZ Standard mentioned below (section 8).

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labeled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions.

After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal.

Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7: Handling and Storage

Handling: Keep out of reach of children.
Do not eat, drink or smoke while using.

Storage: Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed, seeds, fertilisers or foodstuffs.
As a Class 9 Substance with Ecotoxicity Classifications storage of Broadstar Herbicide must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the HSNO Emergency Management Regulations.

Section 8: Exposure Controls/Personal Protection

Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.



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Eye Protection:	Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.
Skin Protection:	If you believe you may have a sensitisation to this product or any of its declared ingredients, you should prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.
Protective Material Types:	We suggest that protective clothing be made from the following materials: rubber, PVC.
Respirator:	Usually, no respirator is necessary when using this product. Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being used.

Section 9: Physical and Chemical Properties

Physical state:	Liquid
Colour:	Light brown
Odour:	Faint odour
pH value:	8-9
Boiling point:	Approximately 100°C @ 100kPa
Melting Point:	0°C
Density (g/ml):	No data
Vapour pressure	2.37kPa @ 20°C (water vapour pressure)
Specific Gravity:	1.16-1.22
Water Solubility:	Completely soluble in water
Volatility:	No data
Odour threshold:	No data
Evaporation Rate:	No data
Coeff Oil/water distribution:	0.77 (pH 5); -0.46 (pH7); -0.55 (pH9) (bentazone only) (log P octanol/water)
Autoignition temp:	Not applicable – does not burn.

Section 10: Stability and Reactivity

Reactivity:	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Conditions to Avoid:	Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Incompatibilities:	strong oxidising agents.
Fire Decomposition:	This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour. Water, sodium compounds. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.
Polymerisation:	This product will not undergo polymerisation reactions.

Section 11. Toxicological Information

Local Effects:	
Target Organs:	There is no data to hand indicating any particular target organs. Bentazone is Classified by SWA as a potential sensitiser by skin contact.

Ingredient	Risk Phrases
Bentazone (as Sodium Salt)	Conc>=25%: Xn; R22; R36; R43
For formulated product:	LD ₅₀ Oral, Rat 1000-2000mg/kg
	LD ₅₀ Dermal, Rat = >4000mg/kg
	LC ₅₀ Inhalation, Rat = >4.8mg/L/4hr



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Section 12: Ecological Information

Harmful to aquatic organisms, may cause long-term adverse effects to the aquatic environment.
Insufficient data to be sure of status.

For Bentazone: Birds: LD₅₀ 1140: mg/kg

Bees: LD₅₀ >100µg/bee

Fish: LC₅₀ rainbow trout: >100mg/L LC₅₀ bluegill sunfish: >100mg/L

Half life in soil is typically 12 days.

For formulated product: **Daphnia:** EC₅₀ >500mg/L

Section 13: Disposal Considerations

Container Disposal: Ensure container is empty. Triple rinse empty container and add rinsate to spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush or puncture and bury in a suitable landfill. DO NOT reuse this container for any other purpose.

Product disposal: Dispose of this product only by using according to the label, or at an approved landfill or other approved facility. Avoid contamination of any water supply with product or empty container.

Section 14: Transport Information

UN Number	3082
Proper shipping name	Environmentally hazardous substance, Liquid, N.O.S, (BENTAZONE)
DG Class	9
Packing Group	III
Hazchem Code	2X
Marine Pollutant	YES
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National transport regulations: Do not carry this product on a passenger service vehicle.

Segregation: Check the land transport Rule Dangerous Goods 1999, Rule 45001 for additional information.

Sea transport may require additional segregation.

Refer: NZS5433; Sea Segregation, or the International Maritime Dangerous Goods Code for details.

Section 15: Regulatory Information

New Zealand Regulatory Information:

NZFSA Approval: Registered pursuant to the ACVM Act 1997, P8176
See www.nzfsa.govt.nz/acvm for registration conditions

Approved pursuant to the HSNO Act 1996, Approval No. HSR000426
See www.ermanz.govt.nz for approval controls

HSNO Classifications: 6.1D, 6.4A, 6.5B, 9.1C, 9.3C





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ECOTOXIC

Section 16: Other Information

Note: This product is a registered agricultural chemical and must be therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

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History:

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