

MATERIAL SAFETY DATA SHEET

Emergency Phone: CHEMTREC 800-424-9300

Effective Date: December 31, 2014

Replaces MSDS of April 12, 2014

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: WILLOWOOD BENTAZON 4

CHEMICAL NAME: Bentazon

CHEMICAL FAMILY: Bentazon Herbicide (Sodium 3-(1-methylethyl)-1H-2,1,3-benzothiadiazin-4(3H)-one 2,2-dioxide)

EPA REGISTRATION NUMBER: 87290-52

COMPANY IDENTIFICATION:

Willowood, LLC

1600 NW Garden Valley Blvd., Suite 120

Roseburg, Oregon 97471

Tel: 877-679-9963

24/7 Health Emergencies: Call 800-858-7378 (National Pesticide Information Center)

2. HAZARDS IDENTIFICATION SUMMARY:

NOTE: Please refer to Section 11 for detailed toxicological information.

EMERGENCY OVERVIEW: WARNING! This product can be harmful if swallowed, comes in contact with the skin or eyes, or is inhaled or ingested. Bentazon 4 can cause eye irritation, mild skin irritation, or allergic skin reaction. The product is an environmentally hazardous substance. This herbicide is toxic to aquatic organisms. Avoid breathing Bentazon 4 spray or mist.

PHYSICAL STATE: Liquid.

APPEARANCE: Amber

ROUTE OF EXPOSURE: Inhalation, Ingestion, Skin Contact, or Eye Contact.

IMMEDIATE EFFECTS:

Eye: Cause substantial but temporary eye injury. Do not get in eyes.

Skin: Harmful if absorbed through the skin. May cause slight irritation. May cause sensitization by skin contact. Avoid contact with skin and clothing.

Ingestion: Harmful if swallowed. Do not ingest.

Inhalation: Harmful if inhaled. Avoid breathing the spray or mist.

CHRONIC OR DELAYED LONG-TERM: ACGIH, NTP, IARC or OSHA do not list this product as a carcinogen.

Medical Conditions Aggravated by Exposure: May cause upper respiratory irritation, dermatitis to the skin and sensitive eyes.

3. COMPOSITION, INFORMATION OF INGREDIENTS:

Components

CHEMICAL NAME	CAS NUMBER	EINECS #	%
Bentazon, sodium salt	50723-80-3	N/E	44.0
Inert Ingredients			56.0

4. FIRST AID MEASURES:

GENERAL: Have the product container or label with you when calling a poison control center or doctor or going for treatment.

INHALATION: Move the exposed person to fresh air, free from risk of further exposure. If the person is not breathing call 9-1-1, then apply rescue breathing and seek medical attention as soon as possible.

EYE CONTACT: Flush with clean, lukewarm water raising upper and lower eyelids at low pressure for 15 minutes. Remove contact lenses, if present, after the first five minutes and continue to rinse the eyes. Seek medical attention if no relief.

SKIN CONTACT: Remove any contaminated clothing. Rinse area with clean water for 15-20 minutes. Call poison control center or doctor for treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice. DO NOT INDUCE VOMITING, unless advised to do so by a medical professional. Lower the head when person is vomiting to minimize entry into throat and lungs.

NOTE to Physician: Inducing vomiting can cause damage to mouth, throat, or lung tissue. Use appropriate supportive and symptomatic treatment as indicated by the patient's condition.

5. FIRE FIGHTING MEASURES:

FLASH POINT: N/A, Aqueous solution, not flammable

FIRE AND EXPLOSION HAZARDS: Bentazon 4 is not flammable or explosive

SUITABLE EXTINGUISHING MEDIA: Bentazon 4 is not flammable. If Bentazon 4 is in the vicinity of a fire, cool containers with water spray to deter decomposition. If dry Bentazon 4 is present use dry chemicals, carbon dioxide, or foam.

FIRE FIGHTING INSTRUCTIONS: Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray to deter decomposition. Dike area to prevent runoff and contamination of water sources. Equipment or materials involved in pesticide fires may become contaminated.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTIONS: Wear PPE per section 8. Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

METHODS FOR CLEANING UP: Avoid breathing the mist. Absorb the spilled material with inert absorbent such as vermiculite. Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

HANDLING AND STORAGE PRECAUTIONS: Use normal safety procedures and good personal hygiene. Wash thoroughly after handling Bentazon 4, and before eating, drinking, chewing gum, or using tobacco.

ADDITIONAL ADVICE: Do not allow Bentazon 4 to enter streams, sewers, or other waterways.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE: Keep containers tightly closed. Avoid high temperatures. Keep in cool dry area above freezing 32 °F (0°C) and below 100 °F (38°C). Store in a cool well-ventilated place.

SPECIAL SENSITIVITY: Avoid contact with skin and eyes; wear PPE per section 8.

HANDLING AND STORAGE PRECAUTIONS: Avoid breathing the mist. Use normal safety procedures and good personal hygiene. Wash thoroughly after handling product, and before eating, drinking, chewing gum, or using tobacco.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION:

EYE PROTECTION: Wear safety glasses or goggles. There is potential for mist exposure to cause injury to the eyes.

SKIN PROTECTION: Wear chemically resistant gloves (e.g. nitrile, butyl or neoprene.) Wear a long sleeved shirt, long pants, shoes, and socks.

RESPIRATORY PROTECTION: Wear an OSHA approved respirator if the airborne conditions result in exposure to a mist or spray.

ENGINEERING CONTROLS: Provide adequate ventilation when product is used. An eyewash and shower should be provided in mixing and loading areas.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM: Liquid

COLOR: Amber

ODOR: No significant odor

pH: 8-9

SOLUBILITY IN WATER: Soluble

SPECIFIC GRAVITY (water=1): 1.19 @
68 °F. (20 °C.)

10. STABILITY AND REACTIVITY:

STABILITY: This product is stable material under normal conditions of storage and handling. Avoid high temperatures and freezing.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBLES: Avoid exposure to any strong oxidizing agents, such as chlorates and nitrates.

DECOMPOSITION PRODUCTS: Thermal decomposition will produce oxides of sulfur, carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION:

The significant routes of exposure are eyes, ingestion, and inhalation.

Oral LD_{50 (rat)} > 1000 mg/kg Dermal LD_{50 (rabbit)} > 4000 mg/kg LC_{50 (rat)} > 4.8 mg/L (4-hr test)

Bentazon is not listed as a carcinogen in ACGIH, NTP, OSHA, or IARC.

Bentazon 4 can cause moderate eye irritation and skin irritation. It can also produce an allergic skin reaction.

There is no evidence Bentazon 4 is mutagenic or a reproductive toxin from animal studies.

12. ECOLOGICAL INFORMATION:

Bentazon 4 is moderately toxic to mammals based on limited animal studies.

Bentazon 4 is slightly toxic to estuarine and marine invertebrates and fish.

Bentazon 4 is slightly toxic to birds by affecting their reproductive capabilities.

Bentazon 4 has been found to be not toxic to bees.

Bentazon 4 is soluble in water and can leach readily through soil. Do not allow product to get in waterways. Do not mix or use within 50 feet of any well or other water resource.

13. DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD: This material is a liquid. Wear an OSHA-approved respirator and other required PPE. Dispose of the material in accordance with label instructions for pesticide and container disposal. Dispose of Bentazon 4 wastes and empty Bentazon 4 containers in accordance with all local, state, and federal regulations.

14. TRANSPORT INFORMATION:

DOT (ground) SHIPPING DESCRIPTION: Not Regulated. Not classified as Dangerous Goods for ground transportation.

IATA (air) SHIPPING NAME: Not Regulated by IATA for shipment by air. Not classified as Dangerous Goods for air transportation.

IMO (water) SHIPPING NAME: Not a Marine Pollutant.) Not regulated for shipment by ocean. Not classified as DG for water transportation.

15. REGULATORY INFORMATION:

OSHA STATUS: Acute target organ effects reported. Sensitizer. Toxic if inhaled.

TSCA STATUS: None.

CERCLA REPORTABLE QUANTITY: None.

CALIFORNIA PROPOSITION 65: Not Listed.

RCRA STATUS: Not Applicable

SARA 311/312 HAZARD NOTIFICATION/REPORTING

IMMEDIATE Y **FIRE** N **SUDDEN RELEASE OF PRESSURE** N

DELAYED Y **REACTIVE** N

SARA TITLE III: None.

SECTION 302 EXTREMELY HAZARDOUS: None.

SECTION 311/312 HAZARD CATEGORIES: None.

SECTION 313 TOXIC CHEMICALS: None

RIGHT TO KNOW: None

16. OTHER INFORMATION:

National Fire Protection Association (NFPA)

Hazardous Materials Identification System (HMIS)

NFPA		HMIS	
	0 Least		
3 Health	1 Slight	3	Health
1 Flammability	2 Moderate	1	Flammability
1 Instability	3 High	1	Reactivity
	4 Severe	H	PPE

RISK PHRASES: R20, Harmful by inhalation; R21, Harmful in contact with skin; R22, harmful if swallowed; R36, Irritating to eyes; R51, Toxic to aquatic organisms;

SAFETY PHRASES: S2, keep out of reach of children; S9, Keep container in a well-ventilated place; S23, Do not breathe vapors; S24, Avoid contact with skin; S25, Avoid contact with eye; S36, Wear suitable protective clothing; S37, Wear suitable gloves; S38, In case of insufficient ventilation, wear suitable respiratory equipment; S39, Wear eye/face protection; and S62, If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

REASON FOR ISSUE: New

APPROVAL DATE: 12/31/2014

PREPARED BY: Jack Firkins

ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
AICS	Australian Inventory of Chemical Substances
CAS#	Chemical Abstract Service Number
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
°C	Celsius temperature scale
CI	China
DSL	Canada Domestic Substances List
ECL	Korean Existing Chemicals List
EEC	European Economic Commission
ENCS	Japanese existing Chemical List
EINECS #	European Inventory of Existing Chemical Substances Number
EU	European Union
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
(Israel)	2001 proposed list of chemical substances to be regulated under Israel Hazardous Substances Law and Regulations List of 1993
IARC	International Agency for Research on Cancer
MAC	Netherlands

MAK	Germany
MITI	Ministry of International Trade and Industry
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute of Occupational Safety and Health
NPIC	National Pesticide Information Center
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Act
PICCS	Philippines
PPE	Personal Protective Equipment
Prop	Proprietary
SARA	Superfund Amendments and Reauthorization Act
SWISS	Giftlist 1 and Inventory of Notified New Substances
TSCA	Toxic Substances Control Act
(Taiwan)	List of Toxic Chemical Substances regulated under Taiwan Toxic Chemical Substances Control Act of November 26, 1986
UK	United Kingdom
USA	United States of America

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