SAFETY DATA SHEET - Hexazinone

SECTION 1: IDENTIFICATION

Product Name	**BRUSH BULLET HERBICIDE**
Registration Number	EPA Reg. No. 102162-1
Chemical Name	Hexazinone: [3-cyclohexyl-6- dimethylamino)-1-methyl-1,3,5-triazine-2,4(1H,3H)-dione]
Chemical Family:	Triazines
Recommended Use:	Herbicide
Manufacturer/Supplier:	Brush Bullet Manufacturing, LLC 10693 Mendota Canadian, TX 79014 Information: 806-705-8385, 9am-5pm, Central Time
For Medical Emergencies	Call your Poison Control Center For Non-Emergencies, Call the NATIONAL PESTICIDE INFORMATION CENTER, 1-800-858-7378 (M-F, 8-12 pm Pacific Time)

SECTION 2: HAZARD(S) IDENTIFICATION:

Pictogram	Hazard Statements	Precautionary Statements
	May cause damage to organs through prolonged or repeated exposure (Respiratory system, kidney)	• Do not breathe dust. • Wash hands and face thoroughly after handling. • Do not eat drink or smoke when using this product.
	Corrosive. Causes irreversible eye damage.	• Wear goggles or face shield. • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lens, if present, after first five minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
	Harmful if Swallowed	• Wash hands and face thoroughly after handling. • Do not eat drink or smoke when using this product. • If swallowed, call a poison control center or your doctor if you feel unwell • Rinse mouth • Dispose of contents/container in accordance with local or regional regulations

This section includes potential acute adverse effects that could occur if this material is not used according to the label:

Skin:	May cause transient irritation with discomfort or rash
Eyes:	May cause clouding of the eye

Carcinogenicity:

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA as a carcinogen.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Characterization: Mixture

	Component	CAS No.	% by Weight
Active Ingredient:	Hexazinone	51235-04-2	99.7%
Other Ingredients			0.3%

SECTION 4: FIRST AID MEASURES:

FIRST AID	
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lens, if present, after first five minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor treatment advice.
IF SWALLOWED:	Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. **DO NOT** induce vomiting unless told to do so by poison control center or doctor. **DO NOT** give anything by mouth to an unconscious person.
Have the product container with you when calling poison control center or doctor or going for treatment.	
** Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage.* Questions: Call 806-705-8385, 9am-5pm.	

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Suitable extinguishing agents: Water, Dry Chemical, Foam, Carbon Dioxide (CO_2)

Special Hazards arising from the substance or mixture

Vapors may form explosive mixtures with air.

Advice for Firefighters

Protective equipment:

Full protective clothing and self-contained breathing apparatus should be worn. Use personal protective equipment. Evacuate personnel and keep upwind of fire. If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Do not allow run-off from firefighting to enter drains or watercourses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Review Sections 5 and 7 of this Safety Data Sheet before proceeding with cleanup. Use appropriate PPE during cleanup.

Personal precautions, protective equipment and emergency procedures
Evacuate personnel, thoroughly ventilate area and use self-contained breathing apparatus. Use personal protective equipment.
Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (i.e., sand, dolomite, acid binders, universal binders, sawdust)
Dispose of contaminated material as waste according to Section 13.
Ensure adequate ventilation.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

- **KEEP OUT OF REACH OF CHILDREN**
- Avoid contact with skin and clothing
- Avoid breathing dust
- Do not get in eyes
- Keep container closed when not in use
- Wear a long-sleeved shirt, long pants and shoes plus socks during application. In addition, wear chemical-resistant gloves and goggles or a face shield.

Information about protection against explosion and fires:
Keep respiratory device available.

Conditions for safe storage, including any incompatibilities:
Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in original container. Store in a cool, dry place. Keep out of the reach of children.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters
Components with Occupational Limits: N/A
Additional information: Personnel who handle with product in its end-use application should use this product only in accordance with its pesticide labeling.

Exposure controls
Personal Protective Equipment (PPE)
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.\Wash hands before breaks and at the end of work.
Store protective clothing separately.
Breathing equipment:
Use NIOSH approved, dual cartridge respirators for dusts or mists if local ventilation is inadequate.
Protection of hands:

Protective Gloves: the glove material has to be impermeable and resistant to the product.

Material of Gloves
Butyl Rubber (BR)
Natural Rubber (NR)
Nitrile Rubber (NBR)
Neoprene gloves
Penetration Time of Glove Material
The exact time has to be determined and observed by the manufacturer of the protective gloves.
Eye protection
Safety glasses/goggles
Body Protection
Wear a long-sleeved shirt, long pants and shoes plus socks during application. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light tan pellet
Odor	Mild, pungent
Odor Threshold	N/A/
pH	8.59 (1% solution)
Melting Point	Not Determined
Boiling Point	Not Determined
Flash Point	Not Determined
Evaporation Rate	Not Determined
Upper/Lower Flammability or Explosive Limits	Not Determined
Vapor Pressure	Not Determined
Vapor Density	Not Determined
Relative Density	Not Determined
Bulk Density	0.595 g/mL
Solubility (in water)	Dispersible
Partition Coefficient: n-octanol/water	Not Determined
Auto-ignition temperature	Not Determined
Decomposition Temperature	Not Determined
Viscosity	Not Determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Not Determined
Chemical Stability	This is a stable material under normal temperature and storage conditions
Possibility of Hazardous Reactions	None known
Conditions to Avoid	None known
Incompatible Materials	Strong Acids and Bases (slowly hydrolyzes)

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:

LD_{50}/LC_{50} Relevant for classification:

Oral	Rat LD_{50}	1,310 mg/kg
Dermal	Rabbit LD_{50}	>5,000 mg/kg
Inhalation	Rat LC_{50}	>5.2 mg/L

SECTION 11: TOXICOLOGICAL INFORMATION, CONTINUED

Primary Irritation effect	
On the skin	No irritation (Rabbit)
On the eye	Corrosive (Rabbit)
Sensitization	Did not cause sensitization (Guinea pig)

Chronic/Subchronic Toxicity Studies:

No cumulative toxicity expected.

Carcinogenicity: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA as a carcinogen.

Reproductive toxicity: No toxicity to reproduction.

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity

Hexazinone

96 h LC_{50}	*Oncorhynchus mykiss* (rainbow trout)	>320 mg/L
120h ErC_{50}	*Skeletonema costatum* (Diatom)	0.022 mg/L
120h NOEC	*Skeletonema costatum* (Diatom)	0.0041 mg/L
48h EC_{50}	*Daphnia magna* (Water Flea)	152 mg/L

Environmental Fate:

Persistence/degradability: Hexazinone is of moderate to high persistence in the soil environment. Hexazinone is broken down by soil microbes, which release carbon dioxide in the process. Sunlight may also break down the compound via photo-degradation.

Mobility in soil: Hexazinone is very poorly absorbed to soil particles, very soluble in water and slowly degraded, so it is likely to be mobile in most soils and has the potential to contaminate groundwater.

Other adverse effects: Practically non-toxic to birds and bees. Slightly toxic to fish and invertebrates.

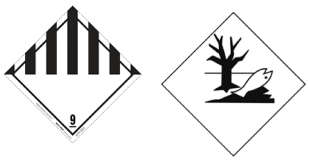
Environmental Precautions:

DO NOT apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. **DO NOT** contaminate water used by wildlife and aquatic life or for domestic and irrigation purposes. **DO NOT** apply where runoff is likely to occur.

SECTION 13: DISPOSAL CONSIDERATIONS

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact State Pesticide or Environmental Control Agency, or Hazardous Waste representative at the nearest EPA Regional Office for guidance.

SECTION 14: TRANSPORT INFORMATION

UN Number:	
IMDG, IATA	3077
UN Proper Shipping Name	
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexazinone)
IATA	Environmentally hazardous substance, solid, N.O.S. (Hexazinone)
Transport Hazard Class/Label	
IMDG, IATA	 Class 9, Marine Pollutant
Packing Group:	
IMDG, IATA	III
Marine Pollutant:	Yes
EMS Number	F-A, S-F
Additional Information:	Not regulated as a hazardous material by DOT Not regulated as a hazardous material by TDG

SECTION 15: REGULATORY INFORMATION

EPA REGISTRATION: EPA Reg. No. 102162-1

SECTION 16: OTHER INFORMATION

Issue Date: April 24, 2023

The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.