



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Formulator:** Gowan Company  
P.O. Box 5569  
Yuma, Arizona 85366-5569  
(800) 883-1844

**For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC®:** **Inside the U.S.:** (800) 424-9300  
**Outside the U.S.:** (703) 527-3887  
(888) 478-0798

**For Medical Emergency:**

**Product:** Sanmite®

**EPA Signal Word:** Warning **EPA Registration No.:** 81880-5-10163

**Active Ingredient:** Pyridaben (75%) **CAS No.:** 96489-71-3

**Chemical Name:** 2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2H)-one

**Chemical Class:** Pyridazinone

### 2. HAZARDS IDENTIFICATION

#### Physical Properties

**Appearance:** Light tan powder  
**Odor:** Vanilla

#### Primary Routes of Exposure

May be fatal if inhaled. Do not breathe dust or spray mist. For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval numbers prefix TC-21 C), or a NIOSH approved respirator with a NPR, or HE prefilter. Wear long-sleeved shirt and long pants, socks and shoes and waterproof gloves. Harmful if swallowed or absorbed through skin. Avoid contact with skin. Remove contaminated clothing and wash before reuse. Causes moderate eye irritation. Do not get in eyes or on clothing. Wear goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling.

#### Medical Conditions Likely to be Aggravated by Exposure

No information found for this mixture.

#### Unusual Fire, Explosion, and Reactivity Hazards

Explosive dust/air mixtures can form in atmospheres as low as 9% oxygen. Ignition energy required is as low as 15 millijoules. Typical dust/air mixtures capable of exploding contain 40 g per cubic meter. Exotherm initiation temperature (Grewer oven): 394° C

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Pyridaben (75%)	0.01 mg/m <sup>3</sup> *	Not Established	Not Established	None

\*Manufacturer's recommendation

Only the identities of the active ingredient(s) and any *hazardous* inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

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## 4. FIRST AID MEASURES

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<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If swallowed</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have the person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. <b>FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT CALL 1-888-478-0798.</b>	

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## 5. FIRE FIGHTING MEASURES

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**Flashpoint (test method):** Not determined  
**Flammable Limits (% in air):** Not determined  
**Autoignition Temperature:** Exotherm initiation temperature (Grewer oven): 394° C  
**Flammability:** Non flammable solid  
**Appropriate Extinguishing Media**

Use water fog, foam, CO<sub>2</sub>, or dry chemical extinguishing media.

### Fire Fighting Guidance

Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Care should be taken to decontaminate firefighters and equipment.

### Unusual Fire, Explosion, and Reactivity Hazards

Explosive dust/air mixtures can form in atmospheres as low as 9% oxygen. Ignition energy required is as low as 15 millijoules. Typical dust/air mixtures capable of exploding contain 40 g per cubic meter. Exotherm initiation temperature (Grewer oven): 394° C

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## 6. ACCIDENTAL RELEASE MEASURES

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### In Case of Spills or Leaks

Emergency response workers should wear a SCBA with Level B protection if dusts will be generated. If possible, keep spilled material dry and recover for use. Spilled material may be carefully swept up and returned to original container.

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## 7. HANDLING AND STORAGE

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May be fatal if inhaled. Do not breathe dust or spray mist. For handling activities, use dust/mist-filtering respirator (MSHA/NIOSH approval numbers prefix TC-21C), or a NIOSH approved respirator with N, P, R, or HE pre-filter. Wear long-sleeved shirt and long pants, socks and shoes and waterproof gloves. Harmful if swallowed or absorbed through skin. Avoid contact with skin. Remove contaminated clothing and wash before reuse. Causes moderate eye irritation. Do not get in eyes or on clothing. Wear goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling.

### Precautions in storing

Do not contaminate water, food, or feed by storage or disposal.

### Storage

Store in a cool, dry place away from heat or open flame. This package contains water-soluble bags inside a foil liner (overwrap). Do not remove the water-soluble bags from the overwrap except for immediate use. If all the water-soluble bags are not used, carefully reseal the overwrap. The water-soluble bags may break if they are exposed to moisture, handled excessively, or handled with wet hands or wet gloves.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Protective eyewear
- Shoes plus socks
- For handling activities, use dust/mist filtering respirator (MSHA/NIOSH approval numbers prefix TC-21C), or a NIOSH approved respirator with a N, P, R, or HE pre-filter.
- Chemical-resistant headgear for overhead exposure.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not re-use them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering Controls Statement:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**Appearance:** Light tan powder  
**Melting Point:** N/A  
**Boiling Point:** N/A  
**Specific Gravity/  
Density:** 15.6 lb/ft(3) packed; 13.45 lb/ft(3) free fall

**Solubility in H<sub>2</sub>O:** Dispersible  
**Vapor Pressure:** Not determined

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## 10. STABILITY AND REACTIVITY

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**Stability:** Stable under normal conditions; relatively unstable to light.  
**Hazardous  
Polymerization:** Does not occur  
**Decomposition  
Products:** HCl, NO<sub>x</sub>, SO<sub>x</sub>, CO  
**Hazardous  
Mixtures:** Pyridaben is a reducing agent – AVOID OXIDIZERS  
**Conditions  
To Avoid:** Not applicable

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## 11. TOXICOLOGICAL INFORMATION

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### Acute Toxicity/Irritation Studies

Rat, Acute Oral LD<sub>50</sub> = 1930 mg/kg  
Rat, Acute Dermal LD<sub>50</sub> > 2000 mg/kg  
Rat, Acute Inhalation LC<sub>50</sub> (4 hour) = 0.62 - 0.66 mg/L  
Rabbit, Eye Irritation - not irritating  
Rabbit, Skin Irritation - Non irritating to skin  
Guinea pig, Dermal Sensitizer - Not sensitizing

Pyridaben was found not to be teratogenic in two species tested, but at a maternally toxic dose the compound did produce only slight non-specific developmental effects in one species.

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## 12. ECOLOGICAL INFORMATION

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This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Keep out of lakes, ponds, or streams. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from target area. Drift or runoff from treated areas may be hazardous to fish in adjacent sites. This product is toxic to bees. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Application early in the morning or at dusk is suggested.

**For the active ingredient:**

Bluegill sunfish, LC <sub>50</sub> (96-h):	1.8-3.3 3 µg/L
Rainbow trout, LC <sub>50</sub> (96-h):	0.73 µg/L
Green algae, EC <sub>50</sub> (48-h):	> 1 mg/L
<i>Daphnia magna</i> , EC <sub>50</sub> (48-h):	0.38 µg/L
Bobwhite Quail, Oral LD <sub>50</sub> :	> 2250 mg/kg
Mallard Duck, Oral LD <sub>50</sub> :	> 2500 mg/kg
Honeybees, LD <sub>50</sub> (contact):	0.024 µg/bee

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## 13. DISPOSAL CONSIDERATION

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**Pesticide Disposal:**

Pesticide wastes are acutely hazardous. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Disposal:**

**Water-soluble packaging:** The outer case and inner overwrap packaging of the water-soluble bag should be incinerated or disposed of in a sanitary landfill, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not re-use the empty packaging.

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## 14. TRANSPORT INFORMATION

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**DOT Classification**

UN 2588, Pesticides, solid, toxic, NOS (contains Pyridaben 75%), 6.1, PG II

**International Maritime Organization**

UN 2588, Pesticides, solid, toxic, NOS (contains Pyridaben 75%), 6.1, PG II, Marine Pollutant

**International Civil Aviation Organization**

UN 2588, Pesticides, solid, toxic, NOS (contains Pyridaben 75%), 6.1, PG II

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## 15. REGULATORY INFORMATION

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**SARA Title III Classification**

Section 302/304:

Not listed

Section 311/312:

Immediate (acute) health hazard

Delayed (chronic) health hazard

Fire hazard

Section 313 chemical(s):

Not listed

**Proposition 65**

Not applicable

**CERCLA Reportable Quantity (RQ)**

Not applicable

**RCRA Classification**

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

**TSCA Status**

Exempt from TSCA

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## 16. OTHER INFORMATION

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### NFPA Hazard Ratings

**Health:** 4  
**Flammability:** 3  
**Reactivity:** 1

0	Least
1	Slight
2	Moderate
3	High
4	Severe

### Prepared By:

Gowan Company  
(800) 883-1844

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