



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 ³ *	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.

4. FIRST AID MEASURES

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

5. FIRE FIGHTING MEASURES

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

Use water fog, foam, CO₂, 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 (Greiner oven): 394° C

6. ACCIDENTAL RELEASE MEASURES

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.

7. HANDLING AND STORAGE

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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 H₂O: Dispersible
Vapor Pressure: Not determined

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions; relatively unstable to light.
**Hazardous
Polymerization:** Does not occur
**Decomposition
Products:** HCl, NO_x, SO_x, CO
**Hazardous
Mixtures:** Pyridaben is a reducing agent – AVOID OXIDIZERS
**Conditions
To Avoid:** Not applicable

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Rat, Acute Oral LD₅₀ = 1930 mg/kg
Rat, Acute Dermal LD₅₀ > 2000 mg/kg
Rat, Acute Inhalation LC₅₀ (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.

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATION

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.

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

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

16. OTHER INFORMATION

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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