



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

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

Emergency Phone: (928) 783-3803
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: **Confirm® 2F Insecticide**

EPA Signal Word: CAUTION **EPA Registration No.:** 8033-111-10163

Active Ingredient: Tebufenozide (22.5%) **CAS No.:** 112410-23-8

Chemical Name: benzoic acid, 3,5-dimethyl-, 1-(1,1-dimethylethyl)-2-(4-ethylbenzoyl) hydrazide.

Chemical Class: Moulting hormone agonist

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

EYE: May cause slight temporary eye irritation. Corneal injury is unlikely.

SKIN: Brief contact is essentially non-irritating to skin. Did not cause allergic skin reactions when tested in guinea pigs. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

INGESTION: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

INHALATION: No adverse effects are anticipated from single exposure to vapor.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Tebufenozide (22.5%)	---	---	1.3 mg/M ³ , TWA	No
Glycerine CAS No. 000056-81-5	15 mg/M ³ total, 5 mg/M ³ respirable	10 mg/M ³	---	No

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 IN EYES:**
- Hold eyes open and rinse slowly and gently with water for 15-20 minutes.
 - Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.
 - Call a poison control center or doctor for treatment advice.
 - Move person to fresh air.
- IF INHALED:**
- 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.
 - Take off contaminated clothing.
- IF ON SKIN OR CLOTHING:**
- Rinse skin immediately with plenty of water for 15-20 minutes.
 - Call a poison control center or doctor for treatment advice.

4. FIRST AID MEASURES - continued

- IF SWALLOWED:**
- Call a poison control center or doctor immediately for treatment advice.
 - Have 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 by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0798, day or night, for emergency treatment information.

5. FIRE FIGHTING MEASURES

FLASH POINT: Non-combustible

METHOD USED: Not available

FLAMMABLE LIMITS:

LFL: Not applicable

UFL: Not applicable

EXTINGUISHING MEDIA: Use the following extinguishing media when fighting fires involving this material: carbon dioxide, dry chemical, or water spray.

FIRE AND EXPLOSION HAZARDS: Pesticide particulates can become airborne. Dried product can burn.

FIRE-FIGHTING EQUIPMENT: Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH approved or equivalent) and full protective gear.

SPECIAL PROCEDURES: Remain upwind. Avoid breathing smoke. Use water spray to cool containers exposed to fire. Contain run-off.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spills or Leaks

Floor may be slippery; use care to avoid falling. Absorb small spills with a non-reactive material such as sand or dirt and place in a suitable container for disposal. Dike the area of large spills. If exposed to the material during cleanup, remove all contaminated clothing promptly. Wash all exposed skin areas with soap and water immediately after exposure. Do not take clothing home to be laundered.

7. HANDLING AND STORAGE

HANDLING: Do not get product in eyes or on clothing. Avoid breathing vapors or spray mist. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. For handling relative to end-use of this product, read the product label for further information concerning the use of personal protective equipment (PPE) under the Worker Protection Standard of 1993.

STORAGE: Do not store this material near food, feed or drinking water. Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

EYE/FACE PROTECTION: Use safety glasses.

SKIN PROTECTION: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required for certain operations, use a NIOSH approved air-purifying respirator.

APPLICATORS AND ALL OTHER HANDLERS: Refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-white
Melting Point:	Liquid
Odor:	Musty
pH:	6 to 7.5
Viscosity:	300 to 600 CPS
Specific Gravity (Water = 1):	1.05 @ 77°F (25°C)
Vapor Density (Air = 1):	<1 Water
Vapor Pressure:	17 mmHg @ 68°F (20°C) Water
Boiling Point:	212°F (100°C) Water
Solubility in Water:	Dispersible
Percent Volatility:	72 to 75%
Evaporation Rate (BAc = 1):	<1 Water

10. STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.

Incompatibility: Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may yield the following: isobutylene

Hazardous Polymerization: Not known to occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Skin Absorption (rat):	>5000 mg/kg
Ingestion (rat):	>5000 mg/kg
Inhalation (aerosol, rat):	>2.7 mg/L (4-hour)

Mutagenic Potential

For tebufenozide, in-vitro and animal genetic toxicity studies were negative. For glycerine, in-vitro genetic toxicity studies were negative.

Reproductive Hazard Potential

Tebufenozide, in animal studies, did not interfere with reproduction. For glycerine, reproductive effects seen in female animals are believed to be due to altered nutritional states resulting from extremely high doses of glycerine given in the diet. Similar effects have been seen in animals fed synthetic diets.

Carcinogenic Potential

Tebufenozide and glycerine did not cause cancer in laboratory animals.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

ECOTOXICOLOGY (based on information for tebufenozide):

Oyster shell (<i>Crassostrea virginica</i>),	Deposition EC ₅₀ is 0.64 mg/L
Earthworm	14 Day LC ₅₀ is >1000 mg/kg
Honeybee	LD ₅₀ is >234 µg/bee
Mallard duck	LC ₅₀ is >5000 ppm
Bobwhite quail	LC ₅₀ is >5000 ppm
Bobwhite quail	LD ₅₀ is >2150 mg/kg
Daphnia magna	48 hour EC ₅₀ is 3.8 mg/L
Rainbow trout (<i>Salmo gairdneri</i>)	96 hour LC ₅₀ is 5.7 mg/L
Bluegill sunfish (<i>Lepomis macrochirus</i>)	96 hour LC ₅₀ is 3.0 mg/L

13. DISPOSAL CONSIDERATION

DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office for guidance.

14. TRANSPORT INFORMATION

DOT Classification

Not regulated

IMDG Classification

Not regulated

IATA Classification

Not regulated

15. REGULATORY INFORMATION

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
Glycerine	000056-81-5	PA1

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III Classification

Section 302/304:

Section 311/312:

Immediate (acute) health hazard

Delayed (chronic) health hazard

Section 313 chemical(s):

None

CERCLA Reportable Quantity (RQ)

To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

RCRA Classification

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.

Toxic Substances Control Act (TSCA)

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

16. OTHER INFORMATION

NFPA Hazard Ratings**Health:** 1**Flammability:** 0**Reactivity:** 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

Prepared By:

Gowan Company
(800) 883-1844

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