



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®:

For Medical Emergency:

Inside the U.S.: (800) 424-9300
Outside the U.S.: (703) 527-3887
(888) 478-0798

Product: Torino

EPA Signal Word: CAUTION

Active Ingredient: Cyflufenamid (10%w/w)

Chemical Name: (Z)-N-[α -(cyclopropylmethoxyimino)-2,3-difluoro-(6-trifluoromethyl)benzyl}] -2-phenylacetamide

Chemical Class:

EPA Registration No.: 8033-103-10163

CAS No.: 180409-60-3

2. HAZARDS IDENTIFICATION

Health hazards

Harmful if absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and gloves. Remove and wash contaminated clothing before reuse.

Symptoms of exposure (Acute effects)

No information

Symptoms of exposure (Long term effects)

No information

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Cyflufenamid (10%w/w)	Not listed	Not listed	N/A	N/A

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 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.

IF IN EYES: Hold eye 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 eye. Call a poison control center or doctor for treatment advice.

4. FIRST AID MEASURES - continued

- IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Wash skin with soap and water. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

FOR MEDICAL EMERGENCIES INVOLVING THIS PRODUCT, CALL TOLL FREE: (888) 478-0798

5. FIRE FIGHTING MEASURES

- Flashpoint (test method):** Not flammable
- Flammability:** Not determined
- Appropriate Extinguishing Media**
Water spray, carbon dioxide, dry chemical powder or polymer foam
- Special protective equipment for fire-fighters**
Wear appropriate protective clothing with self-contained breathing apparatus.
May involve harmful and irritant gas/fume in heating or combustion.
-

6. ACCIDENTAL RELEASE MEASURES

In Case of Spills or Leaks

Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area. Sweep up and place in an appropriate container. Hold for disposal. Wash contaminated surfaces to remove any residues. Remove contaminated clothing and wash before reuse.

7. HANDLING AND STORAGE

Handling

Avoid contact with eyes, skin or clothing. Avoid breathing vapors, Avoid releasing to this product to environment.

Storage

Store in a cool, ventilated, dry place. Store only with compatible chemicals. Avoid direct contact with oxidizing agent or organic peroxide. Do not storage in or around home. Keep container tightly closed

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Safety glasses with side shields
- Chemical resistant gloves
- Working shoes plus socks

If you want more options for chemical-resistant materials, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Form:** Viscous liquid
- Color:** Opaque
- Odor:** Mildly aromatic
- Density:** 1.04 g/ml

- Boiling point:** Not available
- Melting point:** Not applicable
- Flash point:** Not flammability
- Flammability:** Not available
-

10. STABILITY AND REACTIVITY

Conditions to Avoid:	Stable under normal storage and use conditions.
Incompatibility:	Avoid excessive heat and flame. Organic peroxide, strong acids or bases
Hazardous Decomposition	
Products:	CO, NO _x , HF and organic compounds on combustion. May generate harmful and irritant gas/fume in heating or combustion

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Ingestion:	Oral LD ₅₀ (rat):	>2000 mg/kg
Dermal:	Dermal LD ₅₀ (rat):	>2000 mg/kg
Inhalation:	Inhalation LC ₅₀ (rat):	>2.64 mg/L (4hr)
Eye Contact:	Minimal	
Skin Contact:	Non-irritating	
Skin Sensitizer:	Not a skin sensitizer	

Carcinogenic Potential
Not listed

12. ECOLOGICAL INFORMATION

Acute Toxicity to aquatic organisms

Acute Toxicity to Fish (rainbow trout) ;	LC ₅₀ (96hr)	>95.7 mg/L
Acute Toxicity to Daphnia ;	EC ₅₀ (48hr)	18.1 mg/L
Acute Toxicity to Algae ;	ErC ₅₀ (72hr)	>14.6 mg/L

Use with care when applying in areas adjacent to any body of water . Do not apply directly to water or to areas where surface water is present or to intertidal areas below mean high water mark. Do not contaminate water used for irrigation or domestic purposes. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not contaminate water when disposing of equipment washwater or rinsate.

13. DISPOSAL CONSIDERATION

- Burn in a chemical incinerator equipped with an afterburner and alkaline scrubber, in accordance with Federal, State or local regulation.
- Do not discharge into waterway or sewer systems unless permission has been obtained by the local authority and suitable dilution has been established.
- Contaminated empty containers must be disposed of as chemical waste. Do not reuse or refill this container
- Obey all Federal, State and local regulations for health, safety, and environmental protection in treating the waste.

14. TRANSPORT INFORMATION

DOT Classification

Not Regulated

International Maritime Organization (IMDG)

Not Regulated

International Civil Aviation Organization (IATA)

Not Regulated

15. REGULATORY INFORMATION

SARA Title III Classification

Section 302/304: Not listed

Section 311/312: Not listed

Section 313 chemical(s): Not listed

Proposition 65

Not applicable

CERCLA Reportable Quantity (RQ)

Not applicable

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.

TSCA Status

Exempt from TSCA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 0

Flammability: 0

Reactivity: 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

Prepared By:

Gowan Company
(800) 883-1844

Notice: 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.

Torino® is a registered trademark of Gowan Company, L.L.C.