



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®:
For Medical Emergency:

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

Product: Vida® Herbicide
EPA Signal Word: DANGER
Active Ingredient: Pyraflufen ethyl (2.5%)
Chemical Name: ethyl [2-chloro-5-[4-chloro-5-(difluoromethoxy)-1-methyl-1H-pyrazol-3-yl]-4-fluorophenoxy]acetate (CAS)
Chemical Class: phenylpyrazole herbicides

EPA Registration No.: 71711-7-10163
CAS No.: 129630-19-9

2. HAZARDS IDENTIFICATION

Emergency Overview

- Corrosive. Causes irreversible eye damage.
- Toxic to fish.

Potential Health Effects:

Primary route(s) of entry: Skin contact
Eyes: Causes irreversible eye damage
Skin: Can cause moderate skin irritation. Harmful if absorbed through the skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Pyraflufen ethyl (2.5%)	Not established	Not established	Not applicable	None

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 doctor or poison control center 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 the poison control center or doctor.
- Do not give anything by mouth of an unconscious person. Avoid alcohol.

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.

If on skin or clothing:

- 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.

4. FIRST AID MEASURES - continued

If inhaled: -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.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage."

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 TOLL FREE: (888) 478-0798

5. FIRE FIGHTING MEASURES

Flashpoint (test method): 86.9°C (188.42°F)
Fire and Explosion Hazards: No known explosion characteristics. Will burn to give off toxic oxides of carbon and nitrogen.
Extinguishing Media: Water, foam, carbon dioxide, or dry powder
Fire Fighting Guidance: Wear positive pressure self-contained breathing apparatus. Spray containers with water to keep cool. Avoid runoff from extinguishing media such as water, foam and dry chemicals into ponds, rivers and lakes due to danger of acute toxicity to aquatic organisms.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spills or Leaks

Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with federal or local disposal regulations (see Section 13). Notify the appropriate authorities immediately (see Section 15 for any applicable Reportable Quantity (RQ)). Report to authorities if product enters watercourse or sewer.)

Liquid spills on the floor or other impervious surfaces should be contained or diked and then absorbed with sawdust, sand, bentonite, or other absorbent clay. Collect contaminated absorbent and place it in a metal drum. Thoroughly scrub the floor or other impervious surface with a strong industrial-type detergent and rinse with water.

Liquid spills that soak in to the ground should be dug up and placed in metal drums. When a large spill or leakage is found, wear protective clothing and self-breathing apparatus to avoid exposure. Avoid contaminated absorbents or water flow into ponds, rivers and lakes due to danger of acute toxicity to aquatic organisms.

7. HANDLING AND STORAGE

Handling Precautions: Avoid contact with eyes, skin, or clothing. Do not eat, drink, smoke, or chew gum or tobacco while handling this product and until hands and face are thoroughly washed with soap and water. Do not use the toilet before thoroughly washing hands. Remove contaminated clothing immediately and wash thoroughly before reuse.
Storage Precautions: Store in the original container. Store in a cool, dry place. Protect from excessive heat. Avoid direct sunlight and freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Control airborne concentrations below the exposure guideline (see Section 2 for any applicable OSHA/ACGIH exposure limits). Local exhaust ventilation may be necessary under certain confined conditions.

Manufacturing and Packaging Employees

Eye/Face	Protective eyewear
Skin Protection	Long-sleeved shirt, long pants, shoes plus socks, chemical resistant gloves
Respiratory Protection	Ensure good ventilation. If not adequate, use a suitable respirator

8. EXPOSURE CONTROLS/PERSONAL PROTECTION - continued

Additional Protection Information

The following personal protective equipment (PPE) must be worn when using product or upon early entry into treated areas during the Restricted Entry Interval (REI):

- Coveralls
- Chemical-resistant gloves, such as nitrile or butyl (waterproof gloves for early entry during REI)
- Shoes plus socks
- Protective eyewear
- For overhead exposure, wear chemical resistant headgear for applicators and other handlers only

Note: Refer to the product label for applicable details concerning the "User Safety Recommendations" and the use of PPE under the EPA Worker Protection Standards (40 CFR Part 170).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brownish yellow mobile liquid
Odor:	Similar to paraffin or naphthalene
Physical State:	Liquid
Melting Point:	Not applicable
Boiling Point:	Not required
Density:	1.016 g/cm ³ at 20°C
Viscosity:	5.34 cP at 25°C
Vapor Pressure:	Not required

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions
Hazardous Polymerization:	None
Conditions To Avoid:	None known

11. TOXICOLOGICAL INFORMATION

The following data are for the finished product: Vida Herbicide.

Acute Toxicity/Irritation Studies

Oral LD₅₀ (rat):	male:	>5,000 mg/kg
	female:	>3,712 mg/kg
Dermal LD₅₀ (rat):		>2,000 mg/kg
Inhalation LC₅₀ (rat):		72.03 mg/L
Eye irritation (rabbit):		Corrosive/severe irritant
Skin irritation (rabbit):		Moderate irritant
Skin sensitization (guinea pig):		Not a sensitizer

12. ECOLOGICAL INFORMATION

Environmental Precautions:

This pesticide is toxic to fish and aquatic invertebrates. This product may contaminate water through drift of spray in wind or via runoff events. Use care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not apply when weather conditions favor drift from treated areas. Do not apply if rainfall is expected within one hour.

13. DISPOSAL CONSIDERATION

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these 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.

Container Disposal: Nonrefillable container. DO NOT reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State or local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT Classification

Non-bulk: Not regulated

Bulk: NA1993, Combustible liquid, n.o.s. (naphthalene), PGIII

IMDG Classification

Not regulated

IATA Classification

Not regulated

15. REGULATORY INFORMATION

SARA Title III Classification

Section 302/304:

Not applicable

Section 311/312:

Delayed (chronic) health hazard

Section 313 chemical(s):

Pyrrolidone (CAS No. 872-58-4) 10%

Napthalene (CAS No. 91-20-3) <10%

Proposition 65

CERCLA Reportable Quantity (RQ): Napthalene CAS#91-20-3 RQ=100 lbs

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

Not applicable

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2

Flammability: 2

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.

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