



MATERIAL SAFETY DATA SHEET

Product: **MONCUT® 70-DF**

Formulator: Gowan Company
P.O. Box 5569
Yuma, Arizona 85366-5569
(928) 783-8844

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:

1. CHEMICAL IDENTIFICATION

Product: MONCUT 70-DF
EPA Signal Word: Caution
Active Ingredient: Flutolanil (70%)
Chemical Name: N-{3-(1-methylethoxy)phenyl}-2-(trifluoromethyl) benzamide
Chemical Class: Fungicide

EPA Registration No.: 71711-14-10163
CAS No.: 66332-96-5

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Flutolanil (70%)	Not established	Not established	Not available	No
Kaolin (30%)	Not established	2 mg/m ³ (respirable dust)	Not available	No

3. HAZARDS IDENTIFICATION

Emergency Overview

- Causes moderate eye irritation.
- Toxic to shrimp.

Physical Properties

Appearance: Light tan granule
Odor: No distinct odor

Symptoms of Overexposure

Effects of overexposure are probably non-specific and slight.

Medical Conditions Likely to be Aggravated by Exposure

Excessive dust inhalation may aggravate pre-existing conditions of the upper respiratory system.

Relevant Routes of Exposure

May be harmful if dust is inhaled or comes in contact with skin. Avoid contact with eyes, skin, or clothing.

Target Organs

Flutolanil (70%): Results from 90-day animal studies suggest no target organ effects under the conditions of normal handling and use.

Unusual Fire, Explosion, and Reactivity Hazards

The product powder can be combustible; dispersion of fine dust in the air can form an explosive mixture. Will burn to give off toxic oxides of carbon and nitrogen.

4. FIRST AID MEASURES

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

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 the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.

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

5. FIRE FIGHTING MEASURES

Flashpoint (test method): Does not flash

Flammability: Not flammable

Appropriate Extinguishing Media

Use water, foam, carbon dioxide, or dry powder.

Fire Fighting Guidance

Wear positive pressure self-contained breathing apparatus. Spray containers with water to keep cool.

Unusual Fire and Explosion Hazards

Dispersion of fine dust in the air can form an explosive mixture.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spills or Leaks

Sweep up carefully while avoiding the formation of a dust cloud. Place in suitable container and seal for disposal. Area can be washed with water to remove last traces of material, but keep out of watercourses or sewers. Inform authorities immediately if contamination occurs. Inform authorities immediately if contamination occurs.

7. HANDLING AND STORAGE

User Safety Recommendations

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. If this product penetrated through your clothing or personal protective equipment, stop handling this product immediately, remove clothing and equipment, wash your body thoroughly, and put on clean clothing and equipment before resuming the handling activity. After handling this product, remove personal protective equipment immediately. Wash the outside of gloves before taking them off. Shower or wash thoroughly and change into clean clothing as soon as possible. Discard clothing and personal protective equipment that cannot be reused, including clothing and other absorbent materials that have been drenched or thoroughly contaminated with this product's concentrate. Otherwise, wash clothing and personal protective equipment (including both the inside and outside of gloves) before each day of reuse according to manufacturer's directions or, if no such directions, in detergent and hot water. Keep and wash them separately from other laundry.

Storage Precautions

Store in the original container and keep closed. Store in a cool dry place. Do not store near or contaminate food or feed products.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Control airborne concentrations below the exposure guidelines (see Section 2 for OSHA/ACGIH exposure limits). Use with adequate ventilation. Local exhaust ventilation may be necessary, especially when used in a confined area.

For Manufacturing and Packaging Employees

Eye/Face

Protection: Safety glasses; chemical workers goggles.

Skin Protection: PVC protective gloves recommended.

Respiratory Protection: Ensure good ventilation. If not adequate, use a suitable dust mask or a dust respirator.

Other/General

Protection:

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):

- Long-sleeved shirt and long pants
- Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

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

Note:

Refer to the product label or Section 7 of this MSDS 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: Light tan granules
Odor: Essentially odorless
Physical State: Solid
Melting Point: 219-221°F, 103.3° ± 0.26°C
Boiling Point: Not applicable

Solubility in H₂O

Flutolanil 9.6 mg/L (9.6 ppm) @ 68°F

Vapor Density (Air=1):

Flutolanil Not volatile

Vapor Pressure

Flutolanil 1.33 X 10⁵ mm Hg @ 68°F or 20°C

10. STABILITY AND REACTIVITY

Stability: Stable at ambient conditions.

Hazardous

Polymerization: None

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Ingestion: Oral LD₅₀ (rat): >5,000 mg/kg
Dermal: Dermal LD₅₀ (rat): >5,000 mg/kg body weight
Inhalation: Inhalation LC₅₀ (rat): >7.37 mg/L – 4 hours
Eye Irritation: Slightly irritating (rabbit)
Skin Irritation: Non-irritating (rabbit)
Skin Sensitization: Non-sensitizing (guinea pig)

11. TOXICOLOGICAL INFORMATION (continued)

The following data were developed with Flutolanil Technical, the active ingredient:

Subchronic (Target Organ Effects):

Results from 90-day animal studies suggest no target organ effects under the conditions of normal handling and use.

Chronic (Cancer Information):

In 2-year feeding studies with flutolanil in rats, no organotoxic effects were observed at dose levels up to 200 ppm. At very high experimental dose levels (2,000 – 10,000 ppm), slight anemia, minor liver damage, and some nephrosis were observed. However, flutolanil had no significant effect on mortality and was not carcinogenic at any of the doses tested. Similar results were seen in dogs administered up to 1250 mg/kg/day.

Carcinogenicity:

Not a carcinogen.

Teratogenicity (Birth Defects):

Flutolanil technical demonstrated no teratogenic effects in rabbits at oral dose levels up to 1,000 mg/kg/day.

Reproductive Effects:

Flutolanil technical showed no adverse effects on reproduction in a 3-generation rat reproduction study at dietary doses up to 10,000 ppm.

Metagenicity (Genetic Effects):

Flutolanil technical was not mutagenic or genotoxic when tested in the Ames gene mutation assay, the mouse micronucleus test, or the chromosomal aberration assay.

12. ECOLOGICAL INFORMATION

Environmental Precautions:

This product is toxic to shrimp. For terrestrial uses, do not apply directly to water, areas where surface water is present, or to intertidal area below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

13. DISPOSAL CONSIDERATION

General Disposal Guidance:

Handling and disposal of pesticide wastes, including spills or rinsates, must be in accordance with Federal, State/Provincial, and local laws and regulations.

Pesticide Disposal

Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at approved disposal facilities.

Container Disposal

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT Classification

Not regulated

International Maritime Organization

None

International Civil Aviation Organization

None

15. REGULATORY INFORMATION

SARA Title III Classification

Section 302/304: Not applicable
Section 311/312: Acute health hazard
Section 313 chemical(s): Not applicable

Proposition 65

Not applicable

CERCLA Reportable Quantity (RQ)

Not applicable

RCRA Classification

Not applicable

TSCA Status

Exempt from TSCA

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 1
Flammability: 1
Reactivity: 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

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.

Prepared By:

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