SAFETY DATA SHEET



1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

| PRODUCT NAME: | Flurprimidol | |
|----------------------|---|--|
| PRODUCT NUMBER: | F376 | |
| COMPANY INFO: | <i>Phyto</i> Technology Laboratories® PO Box 12205, Shawnee, KS 66282-2205 Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442 www.phytotechlab.com | |
| EMERGENCY PHONE NUM | IBER: 1-800-535-5053 - US Only 1-352-323-3500 - International | |
| RECOMMENDED USE: | For Research Use Only | |
| RESTRICTIONS ON USE: | Products sold by <i>Phyto</i> Technology Laboratories® are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals. | |

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification:

H302 – Acute toxicity, Oral (Category 4)

- H315 Skin irritation (Category 2)
- H319 Eye irritation (Category 2A)

GHS Label elements, including hazard and precautionary statements:

Pictogram:



Signal Word: Warning

Precautionary Statements:

P280 – Wear protective gloves/protective clothing/eye protection/face protection. P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazard Statements:

H302 – Harmful if swallowed.

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: α -(1-Methylethyl)- α -[4-(trifluoromethoxy)phenyl]-5-pyrimidinemethanol

CAS No.: 56425-91-3

Formula: $C_{15}H_{15}F_3N_2O_2$

Molecular Weight: 312.29 g/mol

| Ingredient | CAS Number | Percent | Hazardous |
|--------------|------------|---------|---|
| Flurprimidol | 56425-91-3 | >99 % | No exposure limits established by OSHA or ACGIH |

4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

| Route of Entry | Symptoms | First Aid Procedures |
|-----------------------|---|---|
| Ingestion | May cause irritation if swallowed | If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention. |
| Inhalation | May cause irritation to respiratory tract | Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention. |
| Eye Contact | Direct contact may cause irritation. May cause redness, tearing, or blurred vision. | Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists. |
| Skin Contact | Irritating. May cause reddening, itching or inflammation. | Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists. |

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

5. FIRE FIGHTING MEASURES

| Suitable Extinguishing Media: | Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire. |
|---|---|
| Special Protective Equipment and Precaution for Firefighters: | In the event of a fire, wear full protective clothing and NIOSH approved self- contained breathing apparatus. Evacuate the area and fight fire from a safe distance. |
| Hazardous Combustion Products: | May emit toxic fumes under fire conditions. |
| Toxic Gases Produced: | Carbon monoxide, carbon dioxide, nitrogen oxides, fluorine |

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas. Avoid breathing dust.

| Environmental Precautions: | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
|------------------------------------|---|
| Method of Containment and Cleanup: | Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let products enter drains. |
| 7. HANDLING AND STORAGE | |
| Precaution for Safe Handling: | Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Wash thoroughly after use. |
| Conditions for Safe Storage: | Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. |
| Incompatibilities: | Strong oxidizing agent |
| Recommended Storage Temperature: | 2 to 6 °C |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs): No data available

Threshold Limit Values (TLVs): No data available

Personal Protective Equipment (PPE):

| Eye/Face Protection: | Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur. |
|-------------------------|--|
| Skin Protection: | Protective gloves |
| Body Protection: | Lab coat |
| Respiratory Protection: | Appropriate respirator |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance: | White to off-white powder | | |
|---|-----------------------------|--------------------------------|-------------------------------|
| pH: | No data | available | |
| Solubility: | Soluble | in DMSO | |
| Melting Point: | 94-96 °C | | |
| Vapor Density: | No data | available | |
| Vapor Pressure: | 485 hPa | (364 mmHg) at 25 °C (77 °F) | |
| Odor: | Mostly o | odorless | |
| Odor Threshold: | No data | available | |
| Viscosity: | No data | No data available | |
| Relative Density: | 1.34 g/cm3 at 24 °C (75 °F) | | |
| Evaporation Rate: | | No data available | |
| Initial Boiling Point Boiling Range: | and | 264 °C (507 °F) | |
| Flammability (solid, | gas): | No data available | |
| Partition coefficient: n-octanol/water): | | log Pow: 3.34 at 20 °C (68 °F) | |
| Auto-ignition Temperature: | | No data available | |
| Decomposition Temperature: | | No data available | |
| Flash Point (Closed Cup): | | No data available | |
| Flammable Limits: | | Upper (%) – No data available | Lower (%) – No data available |

10. STABILITY AND REACTIVITY

| Reactivity: | No data available |
|-----------------------------------|--|
| Chemical Stability: | Stable under normal conditions of use |
| Possibility of Hazard Reactions: | Will not occur |
| Conditions to Avoid: | Dust generation |
| Incompatibles Materials: | Strong oxidizing agents |
| Hazardous Decomposition Products: | Carbon monoxide, carbon dioxide, nitrogen oxides, fluorine |

11. TOXICOLOGICAL INFORMATION

| Toxicity: | LD ₅₀ (Oral-Rat)(mg/Kg): | | Male: 914, Female: 709 |
|------------------|-------------------------------------|-----------------|------------------------|
| | LD ₅₀ (Skin-Rat)(mg/Kg): | | >500 |
| | LD ₅₀ (Dermal-H | Rabbit)(mg/Kg): | >5,000 |
| Carcinogenicity: | NTP: | No | |
| | IARC: | No | |

| | Z List: N | lo |
|---|---------------------|---|
| | OSHA Reg: N | lo |
| Reproductive Toxicity: | No data available | |
| Symptoms Associated with Overexposure: | | gastrointestinal upset, nausea, vomiting, weight loss, possible kidney or liver e reproductive effects |
| Specific Target Organ | Single Exposure: | No data available |
| Toxicity: | Repeated Exposure | e: No data available |
| Target Organs: | Kidneys, liver | |
| Medical Conditions Aggravated By Exposure: | None identified | |
| Routes of Entry: | Ingestion, skin and | l eye contact |
| NIOSH/RTECS NO: | UV9283500 | |
| | | |

The toxicological properties of this product have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

| Ecotoxicity: | Toxicity to fish - LC50 - Lepomis macrochirus (Bluegill sunfish) - 17.2 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 18.3 mg/l - 48 h Toxicity to daphnia - LC50 - Daphnia - 11.8 mg/l - 48 h |
|--------------------------------|---|
| Persistence and Degradability: | No data available |
| Bioaccumulative Potential: | Does not bioaccumulate. |
| Mobility in Soil: | No data available |
| Other Adverse Effects: | Harmful to aquatic life |

13. DISPOSAL CONSIDERATION

| Disposal Procedure: | Dispose in accordance with all applicable federal, state, and local environmental |
|---------------------|---|
| | regulations. |
| | |

EPA Hazardous Waste Number: No data available

14. TRANSPORT INFORMATION

| Domestic (D.O.T.): | Proper Shipping Name: | CHEMICALS, N.O.S. (NON-REGULATED) | |
|--------------------|-----------------------|-----------------------------------|--|
| | Hazard Class: | N/A | |
| | UN/NA: | N/A | |
| | Labels: | N/A | |
| International: | | | |
| IMDG: | Proper Shipping Name: | CHEMICALS, N.O.S. (NON-REGULATED) | |
| | Hazard Class: | N/A | |
| | UN/NA: | N/A | |
| | Labels: | N/A | |
| | | | |
| IATA: | Proper Shipping Name: | CHEMICALS, N.O.S. (NON-REGULATED) | |
| | Hazard Class: | N/A | |
| | UN/NA: | N/A | |
| | Labels: | N/A | |

15. REGULATORY INFORMATION

| TSCA: | No | |
|---|--|--|
| SARA TITLE III: | | |
| Section 302 (EHS) Ingredients: | No | |
| Section 313 Ingredients: | No | |
| Section 304 (EHS/CERCLA) Ingredients: | No | |
| Section 311/312 Hazard: | Acute Health Hazard | |
| Massachusetts Right to Know Components: | No components are subject to the Massachusetts Right to Know Act. | |
| Pennsylvania Right to Know Components: | CAS No.: 56425-91-3 alpha-(1-Methylethyl-alpha-[4- (trifluoromethoxy)phenyl]-5- pyrimidine methanol | |
| New Jersey Right to Know Components: | CAS No.: 56425-91-3 alpha-(1-Methylethyl-alpha-[4- (trifluoromethoxy)phenyl]-5- pyrimidine methanol | |
| California Prop. 65 Components: | This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. | |

16. OTHER INFORMATION

| HMIS Rating: | Health Hazard | Chronic Health Hazard | Flammability | Physical Hazard |
|--------------|---------------|-----------------------|--------------------------|-----------------|
| | 2 | | 0 | 0 |
| NFPA Rating: | Health Hazard | Fire Hazard | Reactivity Hazard | Special Hazard |
| | 2 | 0 | 0 | |

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