

MATERIAL SAFETY DATA SHEET

PRODUCT : Clodinafop Propargyl 15% WP

PRODUCT DESIGNATION : Herbicide

Section 1. Product & Company Identification

Common Name : Clodinafop Propargyl
Grade : Formulation
Active Ingredient : Clodinafop Propargyl
Chemical Name of Active : Prop-2-ynyl(R)-2-[4-(5-chloro-3-fluoro-2-pyridyloxy)
Ingredient (IUPAC) phenoxy] propionate
Chemical Family of A. I. : aryloxyphenoxy propionate
Molecular Formula of A. I. : C₁₇H₁₃ClFNO₄
Molecular Mass of A. I. : 349.7 g/mol
Manufacturer & Supplier : **M/s United Chemicals**
Head office:B-371, 1st Floor, Meera Bagh, New Delhi,
Factory:15/1, 15/2, 15/3, Industrial Estate, Vidisha,
(M.P)
Telephone Number : +91-11-25258770

Section 2. Composition / Information on Ingredients

<u>Name of Components</u>	<u>Concentration% w/w</u>
Clodinafop Propargyl a.i	15.00% w/w
Inert ingredient	85.00% w/w
TOTAL	100.00% w/w

Section 3. Hazards Identification

Symptoms of Acute Exposure

Causes irritation to the eyes, skin and respiratory tract. Skin allergies are possible. Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.

Section 4. First Aid Measures

If in Eyes : Flush immediately with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

If in Skin : Wash thoroughly with soap and water. Remove contaminated clothing and shoes and launder.

If Inhaled : Remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If Swallowed : Offer a glass of water or milk to drink. Call a physician or poison control center. Do not induce vomiting unless directed.

Antidote: There is no specific antidote. Treat symptomatically.

Section 5. Fire Fighting Measures

Specific hazards: If involved in a fire, it will emit hydrogen chloride and possibly organo chlorine compounds.

Extinguishing media and methods:

Dry chemical, water spray, foam, carbon dioxide.

Recommended protective clothing:

Wear SCBA and chemical-protective clothing.

Suitable Extinguishing media:

Extinguishing media - small fires Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires Alcohol-resistant foam or Water spray.

Extinguishing media which shall not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

Special protective equipment for firefighters

Wear full protective clothing and self-contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions: Use protective clothing. Avoid contact with skin, eyes and clothing. Remove contaminated clothes and shoes immediately

Environmental precautions: Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/ material. Disposal procedures: Dispose of waste safely, according to local Council regulations.

Soil Spill procedures: Wear appropriate protective clothing and prevent material from entering waterways. Absorb spills with inert material and place in waste containers. Wash area with water and Absorb with further inert.

Section 7. Handling & Storage

Handling:

Avoid contact with skin and eyes. Ventilation required. Keep away from: sparks, open flame and direct sunlight.

Storage:

Keep away from children.

Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Store in a well ventilated place. Keep container tightly closed.

Section 8. Exposure Control, Personal Protection

Occupational Exposure Controls:

Ventilation: Provide local exhaust ventilation system.

Eye protection: Employee must wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.

Emergency eye wash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain within the immediate work area for emergency use.

Clothing: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves: Employee must wear appropriate protective gloves to prevent contact with this substance.

Section 9. Physical and Chemical Properties

Appearance / state	: Snow white color fine powder
Colour	: White
Odour	: Characteristic
pH	: 4.5 to 7.0
Density	: 1.37
Flammability	: Flammable
% Persistent foam	: Maximum: 40 ml after 1 min.

Section 10. Stability & Reactivity

Incompatibility : Strong oxidizers, strong acids, alkalis.

Polymerization : Polymerization will not occur

Hazardous decomposition : May decompose at high temperatures to form toxic gases.

Section 11. Toxicological Information

Acute Oral Toxicity : LD₅₀ for rats : >2000mg/kg

Acute Dermal Toxicity : LD₅₀ for rats : >4000 mg /kg

Acute Inhalation : LC₅₀ (4h) for male and female rats : >3.50mg/l

Eye Irritation : Moderately Irritating to Eyes

Skin Irritant : Moderately irritating

Skin sensitization : sensitizer

Section 12. Ecological Information

Birds Acute oral LD₅₀ for Bobwhite Quail and Mallard Ducks >7000 mg/kg

Fish LC₅₀ (96h) for Rainbow trout 0.39 mg/l

Daphnia LC₅₀ (48 h) >74 mg/l

Algae EC₅₀ (96h-120h) >65.5 mg/l

Section 13. Disposal Consideration

Triple rinse container and add residue to spray tank. Return empty container to an A Recovery collection point for disposal. Empty container precautions: Avoid contamination of any water supply with chemical or empty container.

Section 14. Transport Information

IMDG Classification

Shipping name : Environmentally Hazardous Substance, Soild, N.O.S.
Class : 9
Packing group : III
UN number : 3082
Marine pollutant : Yes

Section 15. Regulatory Information

Approved handlers : This product must be under the care of an approved handler during use. Tracking requirements apply.

Section 16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

Safety Division : UNITED CHEMICALS, SAFETY DIVISION