



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Clodinafop Propargyl Technical  
CAS No : 105512-06-9  
Use : Herbicide  
Company Info : M/s HPM Chemicals & Fertilizers Ltd  
209-210, Anupam Bhawan, Commercial Complex  
Azadpur, Delhi-110033  
Telephone : (011)-45071800, 899  
Fax : (011)- 27681800  
Website : [www.hpmindia.com](http://www.hpmindia.com)  
E-mail : [info@hpmindia.com](mailto:info@hpmindia.com)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition	Concentration
Clodinafop Propargyl a.i.	95.00% min.
Other associates impurities	5.00% max

## 3. HAZARDS IDENTIFICATION OF PREPARATION

Classification of risk of chemical product:

### **Dangers for the health of the people**

Effects of one on acute exposure (short time): Information non-available

Inhalation: May be a mechanical irritant.

Contact with the skin: Repeated dermal contact with the active ingredient may cause skin irritation with itching, burning, redness, swelling or rash..

Contact with the eyes: May cause eye irritation with tearing, pain or blurred vision.

Effects of one on chronic exhibition (long time): Information non-available.

Dangers for the environment: To avoid that the product reaches the water obstacles

Dangers special are of the product: None if it is used suitably.

## 4. FIRST AID MEASURES

Skin: 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.



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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 further treatment advice.

Ingestion: No specific intervention is indicated as the product is not likely to be hazardous by ingestion. Consult a physician if necessary.

Inhalation: No specific intervention is indicated as the product is not likely to be hazardous by inhalation. Consult a physician if necessary. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Antidote: None reported.

### **5. ACCIDENTIAL RELEASE**

Clean up spills immediately, using precautions described in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Absorb spill with inert material such as dry sand, vermiculite or fuller's earth, then place in a chemical waste container. Rinse area with dilute soda ash and place rinsate into chemical waste container.

LARGE SPILL: Same as for small spills; may neutralize with dilute alkaline solutions of soda and ash and place into chemical waste container. Do not allow material to run off into soil, drainage systems, or bodies of water.

Notify and consult with proper regulatory authorities.

### **6. FIRE-FIGHTING MEASURES**

FLASHPOINT(method):None

FIRE AND EXPLOSION HAZARD: Minimize use of water to prevent environmental contamination.

EXTINGUISHING MEDIA: Use carbon dioxide, foam, dry chemical or water spray when fighting fires involving this material.

FIREFIGHTING INSTRUCTIONS: Evacuate area and fight fire from a safe distance. Approach from upwind to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Foam fire extinguishing system is preferred to prevent environmental damage from excessive water run off. If water is used, avoid heavy hose streams. If possible, dike and collect water used to fight fire to prevent minimize run off.

FIREFIGHTING EQUIPMENT: Self-contained breathing apparatus with full face piece. Wear full firefighting turn-out gear (Bunker gear).

HAZARDOUS COMBUSTION PRODUCTS: CO, Phosphorus oxides and Nitrogen



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### 7. HANDLING AND STORAGE

<b>Handling</b>	:	Use appropriate (impervious) clothing, gloves and closed foot ware to prevent the repeated contact with skin. Use flash proof and dust resistant goggles to prevent the contact with eyes.
<b>Storage</b>	:	Keep the product in original container tightly closed and correctly labeled. Store in suitable, cool, dry, well ventilated place under lock and key; away from the reach of the children, animals, food and animal feeding stuffs. Store away from the incompatible substances and source of ignition

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Technical protective measures</b>	:	None
<b>Exposure controls limits</b>	:	Not Established
<b>Respiratory protection</b>	:	Wear suitable mask
<b>Hand protection</b>	:	Wear impervious gloves
<b>Eye protection</b>	:	Wear flash proof and dust resistant goggles.
<b>Skin protection</b>	:	Wear impervious clothing and closed foot ware.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Off-white to white free flowing powder
<b>Melting Point:</b>	57 – 61°C
<b>Moisture content, % by mass, max.:</b>	0.5
<b>Acetone insolubles, % by mass, max. :</b>	0.5
<b>Acidity (as H<sub>2</sub>SO<sub>4</sub>), % by mass, max:</b>	0.1



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### **10. STABILITY AND REACTIVITY**

Stability: Stable under normal temperatures and pressures.

Stability conditions to avoid: Excess heat, and incompatible materials.

Incompatibilities with other material: None reasonably foreseeable

Hazardous Decomposition products: Under fire conditions may produce gases such as oxides of carbon, hydrogen, nitrogen and sulfur.

### **11. TOXICOLOGICAL INFORMATION**

skin irritation: Non-irritating to rabbit

Eye irritation: Slightly irritating to rabbit

Sensitization: Not a sensitizer to Guinea pig.

Oral to Rat: > 5000 mg/kg.

Dermal to Rabbit: > 2000 mg/kg.

Inhalation to Rat: LC<sub>50</sub> : 5.0 mg/L.

### **12. ECOLOGICAL INFORMATION**

ENVIRONMENTAL SUMMARY: This pesticide is moderately toxic to fish, and practically non-toxic to birds, bees and other wildlife. Do not apply directly to water, or to areas where surface water is present. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites.

Fish toxicity: LC<sub>50</sub>(96 h) for trout and bluegill sunfish >1000, fathead minnow 97, channel catfish 130 mg/l.

Avian toxicity: Oral LC<sub>50</sub>, Bobwhite quail – 5620 mg/Kg (5 day dietary toxicity)

Daphnia: LC<sub>50</sub>(48 h) 930 mg/l.

Algae: EC<sub>50</sub>(72 h) for *Scenedesmus subspicatus* 72.9 mg/l.

Worms: LC<sub>50</sub>(14 d) for *Eisenia foetida* >5000 mg/kg soil.

Bees toxicity: non-toxic: oral/contact 48 h > 100 µg/bee.

Other beneficial spp. No effects on carabid beetle; harmless to slightly harmful to green lacewing, parasite species, mites/spiders and insects, except moderately harmful to *Bembidion lampros*.

### **13. DISPOSAL CONSIDERATION**



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Aquatic Organisms: LC<sub>50</sub> for fish: Bluegill: > 150mg/l (96h), Rainbow trout: 150mg/l (96h).  
LC<sub>50</sub> for bird: Bobwhite: 2510 mg/kg,  
Mallard duck: 2510 mg/kg. EC<sub>50</sub> for Daphnia: > 150 mg/l (48h) LD<sub>50</sub> for Honeybee: > 25µg/kg (48h) LC<sub>50</sub> for Earthworms: > 1000mg/kg (14d).

### **14. TRANSPORT INFORMATION**

Classified as a dangerous good-  
SEA TRANSPORT –  
IMDG UN Number 3082  
Proper Shipping Name  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (clodinafop-propargyl and cloquintocet-mexyl)  
Dangerous Goods Class 9  
Hazchem Code 2X  
Packing Group III  
Special Precautions  
Marine pollutant

### **15. REGULATORY INFORMATION**

Clodinafop-propargil, cloquintocet-mexyl and aromatic hydrocarbons are listed in the Australian Inventory of Chemical Substances (AICS)

### **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 on 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 produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.