

MATERIAL SAFETY DATA SHEET

PRODUCT : Fenoxaprop-p-ethyl 10% EC

PRODUCT DESIGNATION : Herbicide

Section 1. Product & Company Identification

Common Name : Fenoxaprop-p-ethyl
Grade : Formulation
Active Ingredient : Fenoxaprop-p-ethyl
Chemical Name of Active Ingredient (IUPAC) : ethyl (2R)-2-[4-[(6-chloro-1,3-benzoxazol-2-yl)oxy]phenoxy]propanoate
Chemical Family of A. I. : Herbicide
Molecular Formula of A. I. : C₁₈H₁₆ClNO₅
Molecular Mass of A. I. : 361.8 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>
Fenoxaprop-p-ethyl a.i	10.00% w/w
Inert Ingredients	90.00% w/w
TOTAL	100.00% w/w

Section 3. Hazards Identification

Inhalation: Inhalation of mist may cause irritation of the upper respiratory tract.

Eyes: Causes severe irritation of eyes.

Skin: Contact causes severe skin irritation.

Ingestion: Harmful if swallowed.

Chronic or delayed long-term effects: This product or its components may have target organ effects.

Section 4. First Aid Measures

General advice : If poisoning occurs, contact a doctor or Poisons Information Centre.

Inhalation : No specific intervention is indicated as the compound is not likely to be hazardous. Consult a physician if necessary.

Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

Eye contact : 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 centre or doctor for treatment advice.

Ingestion : Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control centre. Never give anything by mouth to an unconscious person. Call a poison control centre or doctor for treatment advice.

Notes to physician

Treatment : Treat symptomatically

Section 5. Fire Fighting Measures

Suitable extinguishing media : Water spray, Alcohol-resistant foam, Carbon dioxide (CO₂), Dry powder. Do not use high volume water jet.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full bunker gear. Smoke and fumes from fire may contain hazardous components. Fight fire from upwind position. Cool closed containers/tanks exposed to fire with water spray. Evacuate personnel to safe areas. Avoid contact with spilled product or contaminated surfaces.

Hazardous Combustion Products: In the event of fire, the following may be released: Carbon monoxide, nitrogen oxides, sulfur oxides and hydrogen chloride.

Unusual Fire and Explosion Hazards: Not explosive. Contain run-off by diking to prevent contamination of water supplies. Do not allow run-off from fire fighting to enter drains or water courses.

Section 6. Accidental Release Measures

Small Spills: Clean-up personnel should protect against skin contact. Remove all sources of ignition. Spills when handling should be cleaned up immediately to prevent spreading.

Large Spills: Keep unauthorized people away. Clean-up personnel should protect against skin contact. Evacuate and isolate spill area. Remove all sources of ignition.

Containment: Do not release into sewers or waterways. Dike spills to prevent contamination to water supplies. Contain spills and absorb liquids by covering with clay or other absorbent material. Vacuum, scoop, or sweep up waste and place in a container for disposal.

Section 7. Handling & Storage

Precautions to Be Taken in Handling and Storage: Store in original container away from direct sunlight and away from children, feed and food products and sources of heat. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from freezing. Recommended minimum transport/storage temperature is 32°F (0°C). Use only in a well ventilated area. Keep away from heat and sources of ignition.

Other Precautions: Consult Local, State, and Federal regulations pertaining to storage and disposal.

Section 8. Exposure Control, Personal Protection

Ventilation: Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred

Protective Gloves: Wear chemical resistant nitrile rubber gloves.

Eye Protection: Wear protective eyeglasses or chemical safety goggles. Contact lenses are not eye protective devices.

Other Protective Clothing or Equipment: Wear long sleeve shirt and long pants and shoes plus socks.

Work/Hygienic Practices: Never eat, drink, nor smoke in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9. Physical and Chemical Properties

Appearance / state	: Liquid
Colour	: Yellowish liquid with aromatic odor
Odour	: aromatic odor.
Melting point °C	: Not determined
Explosive properties	: Not explosive
Density	: 1.03
Water solubility	: Emulsifiable
pH (1% emulsion in water)	: 6.7
Flash Point	: 162°F (72°C)

Section 10. Stability & Reactivity

Stability : Storage temperature should ideally lie between 0°C and 40°C; however, storage for two weeks at 54°C has shown no adverse effects regarding product safety or stability.

Chemical Incompatibilities: No data available.

Conditions to Avoid: Freezing, heat, flames and sparks

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

Acute Oral Toxicity LD₅₀ for rats : >5,000mg/kg

Acute Dermal Toxicity LD₅₀ Rabbit : >3,254 mg /kg

Acute Inhalation LC₅₀ (4h) for male and female rats : >5.4 mg/l

Eye Irritation Rabbit : May cause severe irritation

Skin Irritant Rabbit : May cause severe irritation

Skin sensitization Guinea pig : Not a skin sensitizer

Section 12. Ecological Information

Toxicity to fish : LC₅₀(96 h)Rainbow trout: > 1.9 mg/l

Daphnia magna : EC₅₀ (48h) : 4.2 mg/l

Toxicity to algae : EC₅₀(72 h): 1.15 mg/l

Bees toxicity : LD50: >100 µg/bee

Section 13. Disposal Consideration

Waste: Dispose of in accordance with applicable Federal, state and local laws and regulations.

Container: Triple rinse (or equivalent) the empty containers. Puncture container to avoid re-use. Then offer for recycling or reconditioning.

Section 14. Transport Information

IMDG CLASSIFICATION

Shipping name : Environmentally Hazardous Substances, Liquid, N.O.S

Class : 9

Packing group : III

UN number : 3082

Marine pollutant : Yes

Section 15. Regulatory Information

US Federal Information:

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Immediate (Acute) health hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

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

