



MATERIAL SAFETY DATA SHEET

FENDER[®] 200EC

ASTRA INDUSTRIAL COMPLEX CO., LTD. (ASTRACHEM)
P.O. BOX 30447, AL-KHOBAR 31952
KINGDOM SAUDI ARABIA

1. PRODUCT IDENTIFICATION

Product Name: **FENDER 200EC**
Active Ingredient : Fenvalerate
Chemical Name(IUPAC): (RS)- α -cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3-methylbutyrate
Chemical Class : Pyrethroid

2. COMPOSITION / INFORMATION ON INGREDIENTS

Material	CAS No.	Proportions (% w/w)
Fenvalerate	51630-58-1	22.91
Organic solvent		69.63
Formulation Aids		7.46

Use:

Fender 200 EC is an insecticide based on the synthetic-pyrethroid Fenvalerate. It is used as a selective contact and stomach-poison insecticide for the control of sucking, chewing and boring insects in a number of crops.

3. HAZARD IDENTIFICATION

Signs of Poisoning: Symptoms of acute poisoning include dizziness, burning and itching. Sever cases of direct contact caused blurred vision, tightness in chest and convulsions.

Primary Routes of Entry: Ingestion, skin and eye contact.

Effects of single overexposures:

Swallowing: Headache, dizziness, blurred vision, nausea, vomiting, diarrhea, pinpoint pupils.

Skin Absorption: May cause irritation.



Inhalation: May cause irritation of eyes, nose and throat.

Eyes: May cause eye irritation, tearing or blurring of vision.

4. FIRST AID MEASURES

Emergency and First aid Procedures

Swallowing:

Calls a physician or poison control center. Do not induce vomiting.

Skin:

Wash affected area with plenty of soap and water. Remove contaminated clothing. Launder contaminated clothing separately. Get medical attention.

Inhalation:

Remove victim to fresh air. If not breathing administer artificial respiration. Avoid unprotected mouth to mouth resuscitation. GET MEDICAL ATTENTION.

Eye:

Hold eyelids open and flush with a steady stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

Note to Physician:

There is no specific antidote. Treat symptomatically. If convulsions occur, diazepam (10 or 20 mg for an adult) should be given slowly, intravenously or rectally and repeated if necessary.

5. FIRE FIGHTING MEASURES

Fire and Explosion:

Flash point : 29.0°C

Flammable liquid

Flammable limits in air:

Not determined.

Auto ignition Temperature:

Not determined.

Extinguishing Media:

Use carbon dioxide or dry chemical for small fires and water fog or foam (alcohol, polymer or ordinary) for large fires. Water steam may spread flames.



Unusual fire and explosion hazards:

Noxious fumes may be emitted under fire conditions.

Special fire fighting procedures:

Fire fighters should use self contained breathing apparatus and full turnout gear. Prevent runoff of fire water. Avoid exposure to smoke.

6. ACCIDENTIAL RELEASE MEASURES

Steps to be taken if material is released or spilled:

Dike the area using absorbent materials such as sand or clay. Recover and contain as much product as possible using absorbent. Clean spill area using a solution of water and detergent. Collect and contain wash water and all contaminated absorbent for disposal. If spilled on the ground, the affected area should be excavated to a depth of 1-2 inches. Prevent the spilled product or washing from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

Waste disposal method:

Dispose of in accordance with local regulations.

Container disposal:

Dispose of in an approved facility according to local regulations.

7. HANDLING AND STORAGE

Store the product in a well-ventilated, secure area out of reach of children and domestic animals. Do not use or store near heat or open flame. Do not store food or feed in storage area. Prevent eating, drinking or smoking in areas where there is a potential exposure to the product. Wash hands before eating, drinking or smoking after using the product.

8. EXPOSURE CONTROLS / PERSONNAL PROTECTION

Protective equipment should be used during the following procedures:



- Manufacture, formulation or application of this product.
- Repair and maintenance of contaminated equipment
- Clear up of leaks and spills.
- Any other activity that may result in hazardous exposures.

Respiratory Protection:

Use NIOSH/MSHA approved respirator for organic vapors. Use positive pressure contained breathing apparatus where emergency conditions or where exposure limits are exceeded.

Ventilation:

Exhaust appropriate for removal of vapors.

Protective clothing:

Chemical resistant gloves, coveralls, apron and foot coverings.

Eye Protection:

Safety goggles or face shield.

User safety recommendations:

Safety showers and eye wash should be easily accessible.

Personnel Protection:

May irritate the eye and skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When preparing spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves and face shield. After use and before eating drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield and contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear light yellow liquid free of visible impurities
Odour	: Aromatic
Melting Point	: Not applicable
Boiling Point	: Not available
Density	: 0.9387 ± 0.005 Kg/L at 25°C

10. STABILITY AND REACTIVITY



Stability: Stable under normal conditions.
Condition to avoid: Excessive heat.
Materials to avoid: Strong oxidizers, acids, and alkalis.

Hazardous polymerization: will not occur

11. TOXICOLOGICAL INFORMATION

Toxicology Data:

Acute Oral LD ₅₀ (rat)	: 2,255 mg/kg
Acute Dermal LD ₅₀ (rabbit)	: >5,000 mg/Kg
Acute Inhalation (4 h rat)	: 505 mg/m ³
Eye Irritation (rabbit)	: Slightly irritant
Dermal Irritation (rabbit)	: Mild irritant

Carcinogenicity, Teratogenicity Mutagenicity:

Fenvalerate is not carcinogenic. It did not show any mutagenic or chromosome damaging activity. It is also not teratogenic to mice and rabbits.

12. ECOLOGICAL INFORMATION

Keep out of water supplies ground water or open water. This product is toxic to bees, fish or other aquatic life.

13. DISPOSAL CONSIDERATION

Pesticide waste are toxic. Do not reuse product containers. Dispose of product containers, waste containers and residues according to local health and environmental regulations.

14. TRANSPORT INFORMATION

Proper Shipping Name: Environmentally hazardous substances, liquid,
(Fenvalerate)
UN number UN No : 3351

ASTRA INDUSTRIAL COMPLEX CO., LTD. (ASTRACHEM)
P.O. BOX 30447, AL-KHOBAR 31952
KINGDOM OF SAUDI ARABIA
www.astra-agri.com.sa



Class	6.1
Packing Group	III
Marine Pollutant	Yes

15. REGULATORY INFORMATION.

Pest Control Product

16. OTHER INFORMATION

Buyer assumes all responsibility for safety and use not in accordance with the product label instructions.