



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name** : Fenvalerate 20% EC

**Common Name** : Fenvalerate

**IUPAC Name** : (RS)-  $\alpha$  -cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3-methylbutyrate

**Chemical Abstracts Name** : cyano(3-phenoxyphenyl)methyl 4-chloro-  $\alpha$  -(1-methylethyl)benzeneacetate

**CAS No.** : 51630-58-1

**Chemical formula** : C<sub>25</sub>H<sub>22</sub>ClNO<sub>3</sub>

**Molecular weight** : 419.9

**Chemical Family** : Pyrethroid

**Use** : Insecticide, acaricide, ixodicide

**Company Name** : HPM Chemicals & Fertilizers Ltd.

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## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Content % (w/w)
Fenvalerate	51630-58-1	20.00
Others	-	80.00



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### 3. HAZARDS IDENTIFICATION

- Health Hazards** : Hazard to humans and domestic animals. May be fatal if swallowed. Harmful if inhaled.  
Environmental Hazards: This product is very toxic to aquatic invertebrates. Keep out of lakes, stream and ponds. Do not discharge effluent containing this product to sewer systems.
- Emergency** : Warning! Keep out of reach of children. Toxic if swallowed and by inhalation.
- Skin and Eyes** : Avoid contact with skin and eyes, may cause irritation.
- Entry route** : Ingestion, Inhalation, Contact with eye or skin.
- Symptoms of poisoning** : Nervousness, anxiety, tremor, convulsions, skin allergies, sneezing, running nose and stiffness of nose.

### 4. FIRST AID MEASURES

- Ingestion** : Call a physician or poison control center immediately. Rinse mouth. Induce vomiting only, if patient is fully conscious.
- Eye** : Rinse the eyes immediately with water for at least 15 minutes. Remove contact lenses, if it is safe to do so. Get medical advice if irritation persists.
- Skin** : Wash the skin immediately with soap and water. If irritation persists, call physician.
- Inhalation** : Move the patient to fresh air and call to physician immediately.
- Advice to Physician** : Treat symptomatically. Administer intravenously, phenobarbital or diphenyl hydantion or their combinations, anti convulsant drugs or DIZEPAM groups of drugs. Attention should be given to maintain respiratory, cardiovascular and renal function. Removal of secretion fluid from trachea by artificial respiration is recommended.

### 5. FIRE FIGHTING MEASURES



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- Specific Hazard** : The product can burn in fire releasing irritating and toxic gases due to thermal decomposition and combustion.
- Extinguishing Media** : Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff. CO<sub>2</sub>, Foam or dry chemical are preferred. Soft stream water fog or fine water sprays if no alternatives. Contain all runoff.
- Hazard From Combustion products** : If involved in a fire, it will emit toxic and noxious fumes of oxides of carbon or nitrogen. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke.
- Protective equipment** : Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

### 6. ACCIDENTAL RELEASE MEASURES

- In Case of Emergency** : Isolate and post spill area. Wear cotton overalls buttoned to the neck and wrist, washable hat, elbow-length PVC gloves and eye/face protection to prevent skin and eyes being affected. Evacuate unprotected and unnecessary personnel from area of spill. If material is leaking from a container, stop the leak only if this can be done safely. Prevent spillage entering drains or watercourses. Contain spill and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as per regulations.
- Clean up Procedures** : To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

### 7. HANDLING AND STORAGE



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- Handling** : Ensure containers are kept closed until using product. Avoid contact with eyes and skin. Wear cotton overalls buttoned to the neck and wrist, washable hat and elbow-length PVC gloves.
- Storage** : DO NOT store near (or allow to contact) fertilizers, fungicides or other pesticides. Store in the closed original container, in a cool well ventilated area, out of direct sunlight. Store in a room or place away from children, animals, food, feed stuffs, seed and fertilizers.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering Controls** : Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.
- Ingestion** : DO NOT eat, drink or apply cosmetics, where there is a potential for exposure to the product.
- Eye Protection** : Safety goggles, chemical splash goggles or face shield for eyes protection should be used. Safety showers and eye wash should be easily available.
- Skin Protection** : Chemical resistant gloves, coveralls socks, apron and chemical resistant foot covering should always be used while handling the product.
- Respiratory protection** : Always use NIOSH/MSHA approved respiratory protection equipment with a universal filter type including particle filter.
- General Protection** : Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist. Elbow-length PVC gloves and face shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Colour** : Yellow
- Odour** : Mild



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<b>Physical state</b>	: Liquid
<b>Flash Point</b>	: 23 °C
<b>K<sub>ow</sub> logP</b>	: 5.01 (23 °C) technical
<b>Solubility</b>	: <b>In water:</b> 1.07 µg/l at (20 °C)

### 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	: Stable under normal conditions.
<b>Conditions to Avoid</b>	: Not available
<b>Incompatible Materials</b>	: Compatible with many insecticides, fungicides and acaricides, but incompatible with alkaline substances and alcohols. A compatibility test is required before using with other products. Do not physically mix concentrate directly with other pesticide concentrates; always dilute first. Alkaline substances may reduce the activity of the product.
<b>Hazardous decomposition products</b>	: Toxic fumes of hydrogen cyanide, chlorine, and toxic oxides of nitrogen and carbon are produced when the product decomposes on heating.
<b>Hazardous Reactions</b>	: Not available

### 11. TOXICOLOGICAL INFORMATION (Technical)

<b>Acute Oral LD<sub>50</sub></b>	: LD <sub>50</sub> for rats 451 mg/kg
<b>Acute Dermal LD<sub>50</sub></b>	: LD <sub>50</sub> for rats > 5000 mg/kg LD <sub>50</sub> for rabbits 1000-3200 mg/kg
<b>Acute Inhalation LC<sub>50</sub></b>	: LC <sub>50</sub> for rats >101 mg/m <sup>3</sup> air
<b>Skin Irritation</b>	: Slightly irritating (Rabbit)
<b>Eye Irritation</b>	: Slightly irritating (Rabbit)
<b>Skin Sensitization</b>	: Not a skin sensitizer (Guinea pig)

### 12. ECOLOGICAL INFORMATION (Technical)

**Bird** : Domestic fowl:



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Acute oral LD<sub>50</sub> >1600 mg/kg

**Mallard ducks:**

Acute oral LD<sub>50</sub> 9932 mg/kg

**Fish** : LC<sub>50</sub> (96 h) for rainbow trout 0.0036 mg/l

**Bees** : **Acute contact toxicity**  
LD<sub>50</sub> = 0.23 µg/bee

### 13. DISPOSAL CONSIDERATIONS

**Disposal** : This material must be disposed of as a Hazardous Waste. Disposal should be in accordance with local, nation or state rule and regulations.

**Disposal of empty Containers** : Break, crush, or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

### 14. TRANSPORT INFORMATION

**Shipping Name** : Pyrethroid pesticide, liquid, toxic, flammable  
**UN No.** : 3351  
**Class** : 6.1  
**Packing group** : III  
**Marine pollutant** : Yes

### 15. REGULATORY INFORMATION

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**Hazard  
symbol**



**Dangerous for the  
environment (N)**

**Risk Phrase**    **R 20/22:** Harmful by inhalation and if swallowed.  
**R 36/37/38:** Irritating to eyes, respiratory system and skin.  
**R 41:** Risk of serious damage to eyes.  
**R 50:** Very toxic to aquatic organisms.  
**R 57:** Toxic to bees.

**Safety  
phrase**        **S 2:** keep out of the reach of children  
**S 23:** Do not breathe vapour/spray.  
**S 24/25:** Avoid contact with skin and eyes.  
**S 36/37/39:** Wear suitable protective clothing, gloves and eye/face  
protection.

### 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 resented 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 produces formulations 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. Accordingly, no guarantee or warrantee expressed or implied is made by HPM Chemicals & Fertilizers Ltd., as to the results to be obtained based upon the user's use of the information, nor does HPM Chemicals & Fertilizers Ltd., assume any liability arising out of user's use of the information.

**Date: 30/03/2020**

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