



## MATERIAL SAFETY DATA SHEET

### **FUNRAZ<sup>®</sup> 400EC**

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

#### 1. PRODUCT IDENTIFICATION

**Product Name:** **FUNRAZ<sup>®</sup> 400EC**

**Chemical Class:** Imidazole

**Use:** Funraz 400EC is used for the control or prevention of fungal plant diseases on cereals, stone fruits, citrus, vegetables and ornamentals

**Producer:** **Astra Industrial Complex Co., Ltd.**  
P.O. Box 30447, Al-Khobar 31952  
Kingdom of Saudi Arabia  
Emergency Tel # (+966) 3 8121 406

#### 2. COMPOSITION / INFORMATION INGREDIENTS

Substance	Proportions (% w/w)	Chemical structure
<i>Prochloraz Technical</i> <b>CAS No.</b> 67747-09-5 <b>Chemical Name:</b> N-propyl-N-[2-(2,4,6-trichlorophenoxy)ethyl]imidazole-1-carboxamide; 1-{N-propyl-N-[2-(2,4,6-trichlorophenoxy)ethyl]} carbamoylimidazole (IUPAC) <b>EC hazard</b> Xn; R22  N; R50, R53	38.86 (400 ± 20 g / L)	
Blend of anionic and nonionic Emulsifiers	13.99	
Organic Solvents	47.15	



### 3. HAZARD IDENTIFICATION

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

**Effects of single overexposures:**

**Swallowing:** Harmful if swallowed.

**Skin Absorption:** May cause irritation.

**Inhalation:** May cause irritation of eyes, nose and throat due to solvent effect.

**Eyes:** May cause eye irritation.

**Chronic:** Prochloraz is not carcinogenic, mutagenic or teratogenic. However, chronic exposure may cause damage to central nervous system and liver.

### 4. FIRST AID MEASURES

#### Emergency and First aid Procedures

**Swallowing:**

Wash mouth with water. Call 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 and keep at rest. 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:**

Slight skin and eye irritation may occur. Gastrointestinal irritation may also occur. Liver damage is possible.

For local contamination treatment should be symptomatic after decontamination.



For systemic poisoning initial treatment should be symptomatic and supportive. If large amount of this product is ingested monitor liver and central nervous system functioning.

## 5. FIRE FIGHTING MEASURES

### Fire and Explosion:

Flash point: 44 C

### 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 including carbon monoxide, nitrogen oxide and hydrochloric acid.

### 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. ACCIDENTAL 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 / PERSONAL 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 be irritated the eyes 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

Assay:	Prochloraz 400 g/L
Appearance:	Clear yellow Brown Liquid free of visible impurities
Odour:	Aromatic
Melting Point:	Not applicable
Boiling Point:	Not available
Density:	1.0317 0.005 Kg/L at 25 C
Flash Point:	44 C

## 10. STABILITY AND REACTIVITY

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

### **Hazardous Decomposition products:**

May be give toxic fumes such as carbon monoxides, nitrogen oxides and hydrochloric acid if burnt.

## 11. TOXICOLOGICAL INFORMATION

### **Toxicology Data:**

Acute Oral LD <sub>50</sub> (rat) :	> 2,000 mg/kg
Acute Dermal LD <sub>50</sub> (rabbit) :	>3,000 mg/Kg
Acute Inhalation (4 h rat):	>2.16 mg/l air.
Eye Irritation:	Slight and reversible
Skin Irritation:	Slight and reversible
Sensitization:	Not sensitizing

**Prochloraz is not Carcinogenic, Teratogenic or Mutagenic.**

## 12. ECOLOGICAL INFORMATION

Keep out of water supplies ground water or open water. This product is toxic to fish and other aquatic organism it has low toxicity to bees and earthworms.



### 13. DISPOSAL CONSIDERATION

Pesticide wastes 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

<b>UN. No:</b>	<b>UN 2903</b>	
<b>Proper Shipping Name:</b>	<b>Pesticide, liquid, toxic, flammable, N.O.S, flash point <math>\geq 23^{\circ}\text{C}</math> (Prochloraz)</b>	
<b>Class:</b>	<b>6.1</b>	
<b>Classification Code:</b>	TF2	
<b>Packing group:</b>	<b>III</b>	
<b>Subsidiary Risks:</b>	<b>6.1 + 3</b>	
<b>Special provisions:</b>	61	
<b>Limited quantities:</b>	LQ19	
<b>Packaging:</b>	Packing instructions	P001, IBC03, R001
	Special packing provisions	
	Mixed Packaging Provisions	MP15
	Instructions	T7
<b>UN Portable tanks</b>	Special Provisions	TP2
	Tank Code	L4BH
<b>ADR Tank</b>	Special Provision	TU15 TE1 TE15
		TE19
	Vehicle for tank carriage	FL
	Transport Category	2
<b>Special provision carriage</b>	Packages	-
	Bulk	-
	Loading, unloading & Handling	CV13 CV28
	Operation	S2 S9
<b>Hazard Identification</b>	<b>63</b>	

### 15. REGULATORY INFORMATION.

Use in well Ventilated area.



## 16. OTHER INFORMATION

**Funraz<sup>®</sup> 400EC** should be transported its original labeled, tightly closed container. Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

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