



MATERIAL SAFETY DATA SHEET

PESTON[®] 500EC

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

1. PRODUCT IDENTIFICATION

Product Name: **PESTON[®] 500EC**

Active Ingredient: Phenthoate

Chemical Class: Organophosphorus

Use: **PESTON 500EC** Used for the Control of Aphididae (aphids), Coccidae & Diaspididae (scale insects), Cicadellidae (leafhoppers), Fulgoridae (lantern bugs), Pseudococcidae (mealybugs), Tingidae (lace bugs), Pyrrhocoridae (cotton stainers, red bugs) and Pentatomidae (shield bugs), Thripidae (thrips), Aleyrodidae (whitefly), Noctuidae (bollworms, stem borers), in citrus fruit, pome fruit, olives, Japanese persimmons, chestnuts, mulberries, cotton, cereals, maize, rice, coffee, tea, sunflowers, sugar cane, tobacco, vegetables, cucurbits, and ornamentals, at 40-75 g/hl, 500-1000 g/ha. Also used for mosquito control (adults and larvae).

Producer: **Astra Industrial Complex Co., Ltd.**
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance	Proportions (% w/w)	Chemical structure
Phenthoate 91% Tech CAS No.2597-03-7 Chemical Name: S- -ethoxycarbonylbenzyl O,O-dimethyl phosphorodithioate (IUPAC)	52.73 (=500 g/L)	 <chem>CCOC(=O)Cc1ccccc1C(=S)P(=O)(OC)OC</chem>
Blend of anionic and nonionic emulsifiers	5.76	
Aromatic Solvent	41.51	

3. HAZARD IDENTIFICATION

ACUTE EFFECTS

Physical hazards:

None

Health hazards:

Inhalation: Vapor or spray mist may be harmful if inhaled.
Eye: None irritating to the eyes.
Skin: None irritating or sensitizing to skin
Ingestion: Harmful if swallowed.

4. FIRST AID MEASURES

First Aid:

In the case of the following Symptoms appearing during spray or inadvertent swallowing, immediately take the first aid treatment and call a physician immediately.

Symptoms of Poisoning

Nausea, headache, giddiness, vomiting, blurred vision, contraction of pupils and diarrhea

Ingestion:

If ingestion is suspected, call a physician or poison control center. If medical assistance cannot be given immediately, induce vomiting and get to a hospital. To induce vomiting, administer 1 or 2 glasses of water and stick finger down throat. Repeat until vomits are clear. And inject 1 to 2 mg of atropine subcutaneous. Or, if available, administer syrup of ipecac (1/2 oz. Or 15 ml). If vomiting does not occur within 10-20 minutes, administer a second does of ipecac. Do



not attempt to give anything by mouth to an unconscious or convulsing person.

Eye:

Irrigate for 15 minutes with copious quantities of water with eyelids held open. If irritation persists, seek medical attention immediately.

Skin:

Remove contaminated clothing. Flush skin with running water for a minimum of 20 minutes. If swelling, redness, blistering or irritation occurs seek medical attention immediately.

Inhalation:

If a person is overcome by excessive exposure to aerosols or vapors of this material, remove to fresh air or uncontaminated area. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention as soon as possible.

Advice to doctor:

If ingestion has occurred less than 2 hours earlier, carry out careful gastric lavage; use endotracheal cuff if available, to prevent aspiration. Observe patient for respiratory difficulty from aspiration pneumonitis. Give artificial resuscitation and appropriate chemotherapy if respiration is depressed. Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Extinguishing Media:

For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires, use foam or water-fog, avoid use of water jet. Contain run-off water with for example, temporary earth barriers.

Fire and Explosion Hazards:

Flash point: >40°C

Combustible liquid: Keep fire exposed containers cool by spraying with water.

Fire Fighting Instructions:

Evacuate area and fight fire upwind from a safe distance 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. Dike and collect water used to fight fire to prevent



environment damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water run off.

Self - contained breathing apparatus with full face-piece.

6. ACCIDENTAL RELEASE MEASURES

Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterway or sewers. Collect in sealed open top containers for disposal. Generously cover the contaminated areas with common, household detergent brush in a small amount of water, work the detergent into the remaining spilled material forming slurry. Collect slurry in sealed open top container for disposal. This material is water pollutant and should be prevented from drainage systems and bodies of water.

Disposal:

Triple rinse containers, add rinsate to the spray tank, then offer container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. On-site disposal of concentrate is not acceptable.

Waste disposal should be carried out by industrial incineration or burial at a site approved by local authorities.

7. HANDLING AND STORAGE

Keep out of reach of Children:

Use only in a well-ventilated area. Do not reuse empty containers. Keep the container closed when not in use. Keep away from food, feed and drinking water. Keep in a well-ventilated, dry place away from heat and other sources of ignition. Keep from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Natural ventilation only required when handling the concentrate. A local exhaust should be used in confined areas to keep the level of solvent within acceptable limits.



Personnel Protection:

- Eye protection: Safety glasses or goggles.
Clothing: Long sleeved shirt and long pants, shoes plus socks.
Gloves: Chemical resistant gloves.
Respirator: All pesticide handlers must wear a respiratory protection device when working.

Preparation of solution

The proper dosages for spray should be confirmed before spray.

Put on rubber gloves and a respirator so as not to contact Peston 500EC directly.

User Safety Recommendations:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, Light yellow liquid free of visible impurities.
pH	6.5 – 8.5
Acidity (g/Kg) as H ₂ SO ₄	<1.0
Flash point	> 40 C
Water content	Not applicable
Solubility in water:	Soluble.

10. STABILITY AND REACTIVITY

Stability: Stable in water, air and from light.

Incompatibility:

Peston 500EC is chemically compatible with all most insecticides, fungicides and acaricides except alkaline ones such as Bordeaux mixture and lime sulfur. Physically however Peston 500EC may be immiscible due to the type of emulsifiers, diluents and carriers

Therefore, on the occasion of making the mixture for the first time, it is recommended that small scale test be carried out in order to see compatibility and phytotoxicity

Hazardous Polymerization: Will not occur

Condition to avoid:

Keep away from heat. Keep away from sources of ignition, No smoking.

Hazardous Decomposition Products:

Thermal decomposition products are toxic and may include hydrocarbons ammonia, organic and acid halides, oxide of carbon, nitrogen and sulfur.

11. TOXICOLOGICAL INFORMATION

LD₅₀ oral for rat the product >600 mg/Kg.

Technical Phenthoate:

LD₅₀ oral for male rat for technical grade material used in the product (Phenthoate) is: 270 mg/Kg.

12. ECOLOGICAL INFORMATION

Keep out of water supplies ground water or open water. This product is very toxic to aquatic organisms.

Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

13. DISPOSAL CONSIDERATION

Disposal Methods:

Do not contaminate ponds, waterways or ditches with chemical or used containers. Dispose of in facility permitted for hazardous waste.

Container Disposal:

Empty container retains product residue. Triple rinse empty containers, return rinse water to dilution mixture, and dispose of dilution mixture as a hazardous waste if it cannot be disposed of by use according to label instructions. Do not reuse container. Offer if for recycling or reconditioning, or puncture and dispose of in properly permitted landfill.



14. TRANSPORT INFORMATION

Proper Shipping Name: Organophosphorus pesticide, liquid, toxic, flammable, flash point $\geq 23^{\circ}\text{C}$ (*Phenthoate*)

UN. No:	UN 3017	
Hazard Class:	6.1	
Classification Code:	TF2	
Packing group:	III	
Subsidiary Risks:	6.1 + 3	
Special provisions:	61	
Limited quantities:	LQ19	
Packaging:	Packing instructions	P001, IBC03, R001
	Special packing provisions	
	Mixed Packaging Provisions	MP15
	Instructions	T7
UN Portable tanks	Special Provisions	TP2 TP28
	Tank Code	L4BH
ADR Tank	Special Provision	TU15 TE1 TE15 TE19
	Vehicle for tank carriage	FL
	Transport Category	2
Special provision carriage	Packages	-
	Bulk	-
	Loading, unloading & Handling Operation	CV13 CV28 S2 S9
Hazard Identification		63

15. REGULATORY INFORMATION.

Organophosphorus Insecticide for agricultural use

16. OTHER INFORMATION

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

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