



MATERIAL SAFETY DATA SHEET

CYGNET[®] 100EC

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

1. PRODUCT IDENTIFICATION

Product Name: CYGNET[®] 100EC

Chemical Class: Pyrethroid Insecticide

Use: CYGNET 100EC is an emulsifiable concentrate formulation containing 100 g/L of the active ingredient Cypermethrin. It is used for the control of a wide range of insects, such as mosquitoes, cockroaches, houseflies and other insect pests in public health and flies and other insects in animal houses. Also it can be used as an animal ectoparasiticide.

Producer: Astra Industrial Complex Co., Ltd.
P.O. Box 30447, Al-Khobar 31952
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance	Proportions (% w/w)	Chemical structure
Cypermethrin 93% Tech CAS No. 52315-07-8 IUPAC Name: (RS)- α -cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate	11.29 (100 gm / L)	
Blend of ionic and non ionic Emulsifiers	6.30	
Organic solvents	82.41	



3. HAZARD IDENTIFICATION

Physical hazards:

Marine Pollutant

Acute Hazard Symptoms:

Inhalation: Burning sensation. Convulsions, Cough. Laboured, breathing. Shortness of breath, Sore throat.

Eye: Redness. Pain

Skin: Redness. Pain

Ingestion: Abdominal pain. Cough

Prevention:

Exposure: Prevent dispersion of dust! Strict Hygiene!

Inhalation: local exhaust, or breathing protection.

Eye: Safety spectacles.

Skin: Protective clothing.

Ingestion: Do not eat, drink, or smoke during work. Wash hands before eating.

4. FIRST AID MEASURES

First Aid:

Exposure: In all cases consult a doctor!

Ingestion:

Remove by gastric lavage and catharsis maintaining blood pressure and airway. Give Oxygen if respiration is depressed. Do not perform gastric lavage if victim is unconscious. Get medical attention immediately.

Eye:

Wash eyes immediately with large amounts of water normal saline. Occasionally lifting upper and lower until no evidence of chemical remain (approximately 15-20 minutes). Get medical attention immediately.

Skin:

Remove contaminated clothes and shoes. Rinse and then wash skin with water and soap.



Inhalation:

Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest, treat systematically and supportively. Get medical attention immediately.

Information for Doctors or other trained persons giving First Aid:

Get medical attention immediately. Keep the original product label.

Antidote:

No specific antidote to Cypermethrin is known. Symptomatic treatment must be carried out. In case of severe intoxication, therapy should include a sedative and anti-convulsant (e.g. Diazepam, Barbiturates, Paraldehyde, etc). If a large quantity is swallowed, unless the patient is vomiting, gastric lavage can be performed with 5 % Sodium Bicarbonate solution followed by powdered activated charcoal. Intravenously 2 to 4 mg at once and every 10 minutes as required under medical attention. 20 to 30 mg or more may be required during the first 24 hours.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Foam, CO₂, Chemical Powders

Unsuitable Extinguishing Media:

Water jets, break bags, glass containers, etc., should not be used.

Special Exposure Hazards in a fire:

As for all organic materials, combustion may lead to hazardous oxides of carbon, nitrogen and other toxic fumes.

Fire Fighting Instructions:

Cool fire-exposed containers with water fog and avoid environmental contamination with extinguishing water.

Special Preventive Equipment for Fire Fighting:

Wear a self-contained respiratory apparatus. Wear protective clothing.



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid contact with eyes and skin. Wear clean rubber gloves, protective clothing and goggles. Replace gloves frequently and destroy them after use. Do not inhale the vapour during preparation of spray.

Environmental Precautions:

Avoid soil and water contamination.

Methods of Cleaning Up:

Carefully clean the spraying equipment towards the end. Clothes should be changed and washed before re-use. Wash the hands, face and other open areas of body during spray with soap and water.

7. HANDLING AND STORAGE

Handling

Wear clean rubber gloves, protective clothing and goggles. Replace gloves frequently and destroy them after use. Do not inhale the vapor during preparation of spray. Loading in spray equipment must be done in the open air. Do not apply a spray treatment upwind and remain away from mist. Do not smoke drink or eat while spraying.

Always wash thoroughly with soap and water after handling and before eating, drinking or smoking. Keep away from heat and open flame.

Storage

Sensitivity to Damp, Light and Oxidation:

Containers should be kept well-sealed and stored in cool, dry and ventilated place with its label intact. Store in a flame-proof area as well away from sparkler heat devices as formulations, consist of highly inflammable solvents.



Special Instruction:

It should be kept under lock and key and should be kept away from foodstuffs, beverages and animal feed. The entrance of the store must be barred to children. Containers should be kept well sealed and stored in a cool, dry and ventilated place with its label intact.

Storage Conditions:

To be stored in a cool, dry place, away from direct sunlight and heat. Store in a flame-proof area as well away from sparkler heat devices as the formulations, consist of highly inflammable solvents.

Minimum two years if stored under original conditions.

Recommended Packaging Material	UN-Approved MS Drums
Supplier Packaging Packaging Material	UN-Approved MS Drums
Packaging Material to be Avoided	PE lined steel containers
Incompatible Substances	Incompatible with alkaline natured pesticides and fertilizers

8. EXPOSURE CONTROLS / PERSONNEL PROTECTION

Personal protective Equipment:

Respiratory Protection:	Wear masks
Hand Protection:	Wear suitable protective gloves.
Eye Protection:	Wear safety glasses or goggles.
Skin Protection	Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Assay Cypermethrin	100 ± 10 g/L
Appearance	Clear yellow liquid free of visible impurities.
Density	0.930 g/ ml
Acidity as H ₂ SO ₄	< 1.5g/ Kg
Flash point	> 40°C
Water content:	< 2.0 g / Kg



10. STABILITY AND REACTIVITY

Hazardous Reaction:	Unknown.
Sensitivity to Jolting:	None
Conditions to Avoid:	Avoid spark generations and flames.
Materials to avoid	Strong alkaline based materials

11. TOXICOLOGICAL INFORMATION

Technical:

LD₅₀ oral for rat for technical grade material used in the product:

Cypermethrin: 250 - 4150 mg/Kg.

Formulation:

LD₅₀ oral for rat: >5000 mg/kg

12. ECOLOGICAL INFORMATION

Persistence in the Environment:

Biodegradation:	Non-toxic to micro-organisms and easily degraded by micro-organisms.
Chemical Degradation	Soil pH influenced to induce break down of the product to CPA, PBA and CO ₂

13. DISPOSAL CONSIDERATION

Product:

Wastes resulting from the use of this product may be disposed at an approved waste disposal facility.

Empty Packaging:

Disposal or incineration method based on state or local codes of practice and laws.



14. TRANSPORT INFORMATION

Land Transport ADR/RID Class: UN No. 2783, Environmentally Hazardous
Sea Transport-IMDG Class: Marine Pollutant.
Air Transport-IATA Class: IMDG Code Class 6.1

15. REGULATORY INFORMATION.

EEC Norms – Information on the warning label.

Symbol : Caution
Risk Phrase Poison White color

Safety advice:

Avoid release to the environment. Please refer to special instruction/safety data sheets.

National Regulations:

Local regulations, if any, should be applied to classification and labeling.

16. OTHER INFORMATION

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