



TECHNICAL DATA BULLETIN

PRODUCT TECHNICAL INFORMATION AND APPLICATIONS

KLASH SUPER 170ULV

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

1. PRODUCT IDENTIFICATION

Product Name: *KLASH SUPER 170ULV*

Chemical Class: Pyrethroid Insecticide

Active Ingredients:

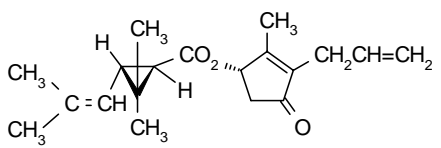
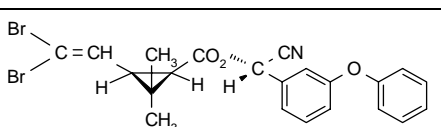
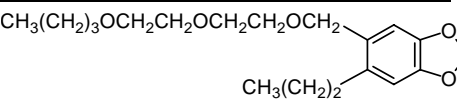
DELTAMETHRIN	15 g/L
S-BIOALLETHRIN	5 g/L
PIPERONYL BUTOXIDE	150 g/L

Use: KLASH SUPER 170ULV is an Ultra Low Volume concentrated Formulation of Deltamethrin, S-bioallethrin and PBO. It contains 15, 5 and 150 g/L of each of these active ingredients respectively. This product is used as an insecticide for the control of insect pests in Public health.

2. ACTIVE INGREDIENT:

COMMON NAME	DELTAMETHRIN	S-BIOALLETHRIN	PBO
Chemical Group	Pyrethriod	Pyrethriod	-
CAS Registry No.	52918-63-5	28434-00-6	51-03-6
Molecular Formula	C ₂₂ H ₁₉ Br ₂ NO ₃	C ₁₉ H ₂₆ O ₃	C ₁₉ H ₃₀ O ₅
Molecular weight	505.2	302.4	338.4
Vapour Pressure	1.24 x 10 ⁻⁵ mPa@25°C	44 mPa @ 25°C	2 x 10 ⁻² mPa@ 60°C
K _{ow} log P	4.6 @ 25°C	Not Available	4.75
Acute oral LD ₅₀ Rat	135 - > 5,000 mg/Kg	784 mg/Kg (male rat)	7,500



Substance	Proportions (% w/w)	Chemical structure
S-bioallethrin CAS No. 28434-00-6 Chemical Name (S)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1R,3R)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate (IUPAC)	0.56	
Deltamethrin CAS No. 7696-12-0 Chemical Name: (S)-α-cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC)	1.60	
Piperonyl Butoxide CAS No. 51-03-6 Chemical Name: 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole; 2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether (IUPAC)	16.45	
Organic solvents	81.39	

3. PHYSIOCHEMICAL PROPERTIES OF THE PRODUCT:

Appearance:	Clear yellow liquid free of visible impurities.
Odour	Slight Aromatic
Density	0.9415 g/ml
Flash Point	46°C
Water Content	0.56 g/Kg
Acidity as H ₂ SO ₄	0.02 g/Kg
Solubility	Not Soluble in water



4. MODE OF ACTION:

Klash Super 170ULV is a fast acting non-systemic insecticide with contact and stomach action. It has a rapid knock down and long residual activity.

5. USES:

Klash Super 170ULV is used as an Ultra Low Volume (ULV) spray or thermal fog for the control of mosquitoes and flies in public health.

6. COMPATIBILITY:

Klash Super 170ULV is compatible with other pesticides. However, small mixture should be made and tried before mixing large quantities.

7. APPLICATION:

Klash Super 170ULV is applied as a ULV spray or thermal fog. The product is applied after being diluted with a suitable carrier such as Diesel oil or Kerosene.

The following table can be used as a guide for the application of **Klash Super 170ULV**

Pests	Application Method	Application Rate
Flying insects such as flies and Mosquitoes	ULV application	Dilute the products with a suitable carrier such as Diesel oil or kerosene at 1:19 and apply at the rate of 0.5 L/ha
	Thermal Fogging	Dilute the product in a suitable carrier such as Diesel oil or Kerosene at 1:2,00 and apply at 5 L/ha



8. HANDLING, STORAGE AND TRANSPORTATION:

Klash Super 170 ULV should be transported in its original labeled, tightly closed container and stored in a dry well ventilated store at room temperature and away from direct sunlight. It should also be kept away from children, animals, food, feed and drinks and unauthorized personnel. Personnel involved in handling this material should wear protective gloves, clean protective clothing and a facemask.

9. OTHER INFORMATION

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