

MATERIAL SAFETY DATA SHEET

Archer ULV

IDENTIFICATION OF THE SUPPLIER:

AGRO CHEMICALS INDUSTRIES LTD
JORDAN AMMAN
P.O.Box 183020 Amman 11118 Jordan
Tel. +962 6 5548224/5
Fax. +962 6 5548220
E-mail info@aci.com.jo

PRODUCT IDENTIFICATION:

Common Name:

Cyfluthrin 1.5% w/v + Bioallethrin 0.4% w/v + PBO 4% w/v

Trade Name: Archer ULV

Type of formulation : Ultra Low Volume (ULV)

Chemical Name:

Cyfluthrin: cyano(4-fluoro-3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate (unstated stereochemistry)

Bioallethrin: 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl 2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate

PBO: 5-[[2-(2-butoxyethoxy)ethoxy]methyl]-6-propyl-1,3-benzodioxole

Chemical Formula:

Cyfluthrin: C₂₂H₁₈Cl₂FNO₃

Bioallethrin: C₁₉H₂₆O₃

PBO: C₁₉H₃₀O₅

Molecular Weight:

Cyfluthrin: 434.3

Bioallethrin: 302.4

PBO: 338.4



PRODUCT COMPOSITION:

Active Ingredient:	% w/v	CAS #
Cyfluthrin	1.5%	[68359-37-5]
Bioallethrin	0.4%	[584-79-2]
PBO	4%	[51-03-6]
Inert ingredient:		
Solvent	Up to 100%	--

HAZARDS IDENTIFICATION:

ACUTE EFFECTS:

Physical hazards:

None

Health hazards: Irritating to eyes and skin.

Inhalation: Vapour or spray mist may be harmful if inhaled.

Eye: Mild irritating to the eyes.

Skin: Prolonged or repeated skin contact may cause irritation or sensitization.

Ingestion: May be harmful if swallowed.

FIRST AID MEASURES:

Swallowed:

Provided the patient is conscious, wash out mouth with water and give 1 or 2 glasses of water to drink. Do not induce vomiting. Immediately transport victim to an emergency facility

Eye:

Irrigate for 20 minutes with copious quantities of water with eyelids held open. If irritation persists, repeat flushing. 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:

Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth-to-mouth. If breathing is labored, give oxygen. Obtain immediate medical attention.



FIRE FIGHTING MEASURES:

Fire and Explosion Hazards:

Flash Point: 46 °C

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

Extinguishing Media:

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

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

Fire Fighting Equipment:

A self-contained breathing apparatus with full face-piece.

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 amounts 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, and 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.

Wastes disposal by industrial incineration or burial at a site approved by local authorities.

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. Store in a well ventilated, dry place away from heat and other sources of ignition. Keep away from freezing.

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:

Facial skin contact may cause temporary facial numbness.

Sensitive workers should use protective clothing. Avoid contact with eyes and skin. Do not inhale spray mist. When preparing spray wear cotton overalls buttoned to the neck and wrist and washable hat, elbow-length PVC gloves and face shield or goggles. 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 or goggles and contaminated clothing.

PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Clear light yellow liquid free of visible impurities.

Odour: Slightly Aromatic

Density: 0.88 ± 0.05 g/ml

PH: 5

Flash point: 46°C

STABILITY AND REACTIVITY:

Stability:

Stable at room temperature.

Incompatibility:

Strong Oxidize Agents. Acids and alkaline materials

Hazardous polymerization:

Will not occur.

Conditions 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 Sulphur.

TOXICOLOGICAL INFORMATION:

Formulation:

LD50 Oral rat >10,000 mg/Kg

Additional information:

May cause skin irritation. In humans may cause tingling or numbness in exposed area (paraesthesia). The effect may result from splash, aerosol or transfer to the face from contaminated gloves and hands. This effect is transient, lasting up to 24 hours.

There is no evidence of any long term or cumulative effects following repeated contamination. Repeated and/or prolonged contact may cause skin sensitization.

Inhalation
Additional Information High concentrations of this product are irritating to the respiratory tract.

LC50 Inhalation rat: 6,850 mg / m³ (3 h)

General Information:

Slight skin and eye irritant (rabbits) May be weak skin sensitizer.

ECOLOGICAL INFORMATION:

Keep out of water supplies ground water or open water. This product is toxic to fish and wildlife.

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

DISPOSAL CONSIDERATIONS:

Disposal Method:

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 or equivalent, empty container, 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.