مـؤسسة صنــاعات الكيماويــات الزراعيــة AGRO CHEMICALS INDUSTRIES LTD.



<u>Material Safety Date Sheet (MSDS)</u> <u>Acifon 50 EC</u>

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 <u>info@aci.com.jo</u>

PRODUCT IDENTIFICATION:

Common Name: Trichlorfon 50% w/v **Trade Name:** Acifon 50 EC **Chemical Name:** dimethyl 2,2,2- trichloro-1 hydroxyethyphosphonate. **Chemical Formula:** C₄H₈Cl₃O₄P **Molecular Weight:** 257.4

PRODUCT COMPOSITION:

<i>Active Ingredient:</i> Chlorpyrifos	% w/∨ 50 %	CAS # [52-68-6]
Inert ingredient:		
Emulsifier	7.5 %	
Solvent	Up to 100%	

HAZARDS IDENTIFICATION:

Risk advice to man and the environment

Harmful if swallowed. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.





FIRST-AID MEASURES:

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. **If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

FIRE-FIGHTING MEASURES: -

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

ACCIDENTAL RELEASE:

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

PERSONAL PROTECTION/SAFTETY:

General Protection:



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Follow all label instructions. Train employees in safe use of the product. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

Eye/Face Protection:

Tightly fitting safety goggles

Hand Protection:

Waterproof gloves.

Body Protection:

Wear long-sleeved shirt and long pants and shoes plus socks.

Respiratory Protection:

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

HANDLING AND STORAGE:

Handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Density: Solubility: liquid, clear 1.1 g/ml Emulsion in water

STABILITY AND REACTIVITY

Storage stability Stable under recommended storage conditions. **Materials to avoid** Strong oxidizing agents



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Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. -Phosphorous oxides, Carbon oxides, Hydrogen chloride gas

TOXICOLOGICAL INFORMATION:

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the technical-grade active ingredient, trichlorfon.

•	female rat: LD50: 1,098 mg/kg	
5	rat: LD50: > 2,000 mg/kg	
Acute Inhalation Toxicity: rat: $LC50: > 2.1 \text{ mg/l}$		
	Exposure time: 4 h	
	Determined in the form of liquid	
	aerosol.	
	highest concentration tested	
	No deaths	
	rat: LC50: > 8.4 mg/l	
	Exposure time: 1 h	
	Determined in the form of liquid	
	aerosol.	
	Extrapolated from the 4 hr LC50.	
Skin Irritation:	rabbit: Slight irritation.	
Eye Irritation:	rabbit: Moderate eye irritation.	
Sensitization:	guinea pig: Non-sensitizing.	
Chronic Toxicity:	Trichlorfon caused cholinesterase inhibition,	
2	anemia, hypercholesterolemia	
	and/or organ effects (liver, kidney,	
	lung, stomach, intestinal) in chronic	
	studies in rats and monkeys.	
	stadios in fats and monito js.	

Assessment Carcinogenicity:

Trichlorfon was not carcinogenic in a lifetime feeding study in rats. In mice, trichlorfon caused an increased incidence of epithelial mammary tumors in females at the excessive high dose. Based on these findings, EPA has classified trichlorfon as "not likely to be carcinogenic to humans at low doses, but is likely to be carcinogenic at high doses."





Reproductive & Developmental Toxicity:

DEVELOPMENTAL TOXICITY: Trichlorfon is not considered a primary developmental toxicant in rats and rabbits. Developmental effects were observed at doses that caused maternal toxicity.

Neurotoxicity:

Trichlorfon caused neurobehavioral effects ascribed to cholinergic toxicity in acute and subchronic studies in rats. In addition, minimal micropathologic findings were observed in the neural tissues of high-dosed rats following subchronic exposure. In a one-generation developmental neurotoxicity study, neurobehavioral effects were observed in the offspring without any correlating micropathologic findings.

Mutagenicity:

Trichlorfon has produced some positive results in a battery of in vitro and in vivo tests.

ECOLOGICAL INFORMATION: -

Environmental Precautions:

Apply this product as specified on the label. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not apply when weather conditions favor runoff or drift. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.

DISPOSAL CONSIDERATIONS:

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

