

MATERIAL SAFETY DATA SHEET

Armor Tech™ CLT 720

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1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Product name: **Armor Tech™ CLT 720**
Chemical name of active ingredient(s): Chlorothalonil: tetrachloroisophthalonitrile
Manufactured for: Makhteshim Agan of North America, Inc.
4515 Falls of Neuse Road, Suite 300
Raleigh, NC 27609
Phone: 919-256-9300
For fire, spill, and/or leak emergencies, contact Phone: 1-800-535-5053
Infotac:
For medical emergencies and health and safety inquiries, contact Prosar: Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Chlorothalonil	1897-45-6	54.0	NE	NE	0.1 mg/m ³	IARC: 2B*
Inert Ingredients		46.0				

NE=not established

*IARC Group 2B - The agent is possibly carcinogenic to humans.

3. HAZARDS IDENTIFICATION

PHYSICAL PROPERTIES

Appearance: Off-white liquid.
Odor: Slight

EMERGENCY OVERVIEW: WARNING. Causes eye irritation. May cause skin irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get into eyes, on skin, or on clothing. Avoid prolonged contact with skin. Avoid breathing spray mist. Do not take internally.

PRIMARY ROUTES OF ENTRY: Inhalation, ingestion, skin, and eyes

SYMPTOMS OF EXPOSURE:

Inhalation: May cause irritation to the respiratory tract, but this is rarely observed.

Eye contact: May cause mild to severe irritation, depending on degree of exposure.

Skin contact: Not readily absorbed through the skin. May cause skin irritation. May be potential skin sensitizer.

Ingestion: May cause irritation to the digestive tract, following ingestion of large amounts.

NOTE TO USER: This product may produce temporary allergic side effects characterized by redness of the eyes, mild bronchial irritation and redness or rash on exposed skin areas. Persons having allergic reactions should contact a physician.

4. FIRST AID MEASURES

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.

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	<ul style="list-style-type: none">• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For medical emergencies involving this product, call ProSAR at 1-877-250-9291.	
NOTE TO PHYSICIAN: Persons having temporary irritation may respond to treatment with antihistamines or steroid creams and/or systemic steroids.	

5. FIRE FIGHTING MEASURES

FLASH POINT: Nonflammable

FLAMMABLE LIMITS IN AIR: LEL: 0.8%; UEL: 7%; Noncombustible

FIRE FIGHTING PROCEDURES: If product is involved in a fire, wear positive-pressure, self-contained breathing apparatus and full protective clothing.

SUITABLE EXTINGUISHING MEDIA: Dry chemical, water spray, foam, or carbon dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: May decompose under fire conditions emitting gases and vapors (e.g. hydrogen chloride), which may be toxic and irritating to the respiratory tract.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Contain spill. Remove as much product as possible by absorbing with inert material. Scrub area with a hard water detergent. Remove any contaminated soil. Place in closed, labeled containers and store in a safe place until disposed. Do not contaminate water while cleaning equipment or disposing of wastes. This product is toxic to fish. Keep out of lakes, streams or ponds. Use proper protective equipment to minimize exposure (see Section 8). Take all necessary actions to prevent and to remedy the adverse effects of the spill. Ensure that the disposal is in compliance with federal requirements and state or local regulations.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Read label carefully before use. Avoid contact with eyes, skin or clothing. In case of skin contact, carefully remove contaminated clothing and wash affected area with soap and water. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Avoid contact with skin or eyes. Wash thoroughly with soap and water after handling. Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in a cool place. Protect from excessive heat. Store product in original container only, away from water, food or feed. Keep container closed to prevent spills and contamination. Carefully open containers. After partial use, replace lid and close tightly. Do not put concentrate or diluted product into food or drink containers.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures. Avoid excessive heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATION AND ON-FARM APPLICATIONS, CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Use chemical splash goggles or face shield.

SKIN PROTECTION: Wear long sleeved shirt, long pants and shoes plus socks.

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HAND PROTECTION: Use chemical resistant gloves (e.g. nitrile, neoprene).

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guidelines. For most conditions, no respiratory protection should be needed; however, if handling without sufficient ventilation, use NIOSH approved air-purifying respirator with any N, P or R95 class filter and an organic vapor cartridge.

ADDITIONAL PROTECTIVE MEASURES: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: Refer to product label.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Off-white liquid.

ODOR: Slight

Boiling Point: 212°F (100°C)

pH: 6-8

Solubility (H₂O): Dispersible in water

Vapor Pressure (mmHg): 5.72×10^{-7} torr @ 25°C

Specific Gravity: 1.33

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

HAZARDOUS POLYMERIZATION: Not applicable.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen Chloride.

CONDITIONS AND MATERIALS TO AVOID: Highly alkaline conditions. Avoid excessive heat.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Acute Oral LD₅₀ (Rat): No data available.

Acute Dermal LD₅₀ (Rabbit): No data available.

Acute Inhalation LC₅₀ (Rat): No data available.

Eye Irritation (Rabbit): Mild to severe eye irritant.

Dermal Irritation (Rabbit): Skin irritant.

Dermal Sensitization (Guinea Pig): Potential skin sensitizer.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This product is toxic to aquatic invertebrates and wildlife. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This chemical is known to leach through soil into groundwater under certain conditions as a result of labeled use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: Do not contaminate water, food or feed by disposal. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal Law. Wastes resulting from the use of this product that cannot be used according to the label instructions or chemically reprocessed may be disposed of at a landfill or waste disposal facility approved for pesticide disposal or in accordance with all applicable regulations. For further guidance, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated

INTERNATIONAL TRANSPORTATION

IMO (vessel): UN3082, Environmentally hazardous substances, liquid, N.O.S. (chlorothalonil), 9, PGIII, Marine pollutant

IATA (air): Not regulated

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.
Section 311/312: Acute health hazard (immediate)
Delayed health hazard (chronic)
Section 313: Chlorothalonil (54%) CAS# 1897-45-6

CA PROPOSITION 65: This product contains a chemical (chlorothalonil) that is known to the State of California to cause cancer.

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

HAZARD RATINGS	NFPA	
HEALTH:	2	0 MINIMAL
FLAMMABILITY:	1	1 SLIGHT
REACTIVITY:	0	2 MODERATE
		3 HIGH
		4 SEVERE

MSDS DATE: 8-21-09. Superseded version dated 9-26-07. Changes made to Sections 1, 3, 4, 5, 7, 12, 13 and 14.

The information contained herein is given in good faith and is believed to be correct, but no warrant, express or implied, is made. Consult Makhteshim Agan of North America, Inc. for further information.