

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS: Arysta LifeScience NA LLC
15401 Weston Pkwy, Ste. 150
Cary, NC 27513

EMERGENCY TELEPHONE NUMBERS:
FOR 24 HOUR EMERGENCY MEDICAL ASSISTANCE CALL: 1-866-303-6952
FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure,
or accident call CHEMTREC 1-800-424-9300

PRODUCT NAME : CHLOROTHALONIL 720 SC
CHEMICAL NAME : Tetrachloroisophthalonitrile
CHEMICAL FAMILY : Chlorinated Benzonitrile Fungicide
PRODUCT CODE : EPA Reg. No. 66330-362

SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL	ACGIH TLV
Chlorothalonil	54.0	1897-45-6	Not Established	Not Established
Silica, amorphous	5.0	112926-00-8	80 mg/m ³	Not Established

SECTION 3 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

EMERGENCY OVERVIEW: Light gray viscous liquid with slight odor.

- May be harmful if swallowed or inhaled.
- May Cause eye, respiratory system and skin irritation.
- May cause sensitization by skin contact.
- Avoid contact with eyes, skin or clothing.
- Keep out of reach of children.

HAZARDOUS DECOMPOSITION PRODUCTS: May decompose at high temperatures forming toxic gases.

UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

SECTION 4 - FIRST AID MEASURES

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice.

IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF INHALED: 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: Call a poison control center or doctor for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: There is no specific antidote if this product is ingested. Treat symptomatically. Persons suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT (method): Will not flash.

FLAMMABLE LIMITS (LFL-UFL): N/A

FIRE AND EXPLOSION HAZARD: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

IN CASE OF FIRE: Use foam, dry chemical or carbon dioxide extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece. Full fire fighting turn-out gear (Bunker gear).

SECTION 6 - ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precaution outlined in section 8. Sweep up material and place in compatible disposal container. Scrub area with hard water detergent. Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

SECTION 7 - HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling. Do not reuse this container. Store in a dry place away from heat. Keep from freezing.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 HOUR TWA): (Refer to Section 3)

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION - Safety goggles.

CLOTHING - Long-sleeved shirt and long pants, Shoes plus socks, Chemical resistant apron when cleaning equipment, mixing, or loading.

GLOVES - Waterproof gloves.

RESPIRATOR - When handling in enclosed areas where exposure limits may be exceeded, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

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

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Light gray viscous liquid

ODOR: Slight

MOLECULAR WEIGHT (technical): 265.9

MOLECULAR FORMULA (technical): C₈Cl₄N₂

BOILING POINT: 212 °F

DENSITY: 1.34 g/mL (11.18 lbs/gallon)

pH: 6.5 - 8.5

VAPOR PRESSURE: Not available

WATER SOLUBILITY: 0.81 mg/l @ 25 °C

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal use and storage conditions.

CONDITIONS TO AVOID: None known.

MATERIALS TO AVOID: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: May decompose at high temperatures forming toxic gases.

HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	-	9,000 mg/kg body weight
Dermal LD ₅₀ (rabbit)	-	> 2,000 mg/kg body weight
Inhalation LC ₅₀ (rat)	-	> 0.704 mg/l - 4 hours
Eye Irritation (rabbit)	-	Moderately Irritating
Skin Irritation (rabbit)	-	Mildly Irritating
Sensitization (guinea pig)	-	A skin sensitizer

REPRODUCTIVE/DEVELOPMENTAL EFFECTS

Chlorothalonil: No evidence of adverse developmental effects in rabbit and rat studies.

CHRONIC/SUBCHRONIC TOXICITY STUDIES

Chlorothalonil: In dogs, 1 year administration caused a significant decrease in body weight gain and increases in absolute liver and kidney weights.

NEUROTOXICITY

No evidence in regulatory studies.

CARCINOGENICITY

Chlorothalonil: No evidence of carcinogenicity in dogs after administration for up to one year. Treatment related increases in the incidence of renal tubular adenoma and carcinoma were observed in rats and male mice. Squamous cell adenomas and carcinomas were also observed in the forestomach of both species. The forestomach tumors seen in rodent species are not relevant to human health, as humans do not possess an anatomical equivalent to rodent forestomach. The relevance of renal tumors to human health is unclear, although metabolism data suggest that the dog, a

species that is resistant to Chlorothalonil-induced renal injury, may be more representative of humans than the rat. IARC identifies Chlorothalonil as a 2B carcinogen (possibly carcinogenic to humans).

OTHER TOXICITY INFORMATION

Surveillance of Chlorothalonil plant workers for over twenty years has not demonstrated any increase in oncogenic potential to humans.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This pesticide is very toxic to aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not clean equipment or dispose of equipment washwaters in a manner that will contaminate water resources.

FISH TOXICITY: (Technical)

96 hour LC₅₀, Rainbow trout - 47 ppb

96 hour LC₅₀, Bluegill - 26.3 ppb

AVIAN TOXICITY: (Technical)

Oral LC₅₀, Bobwhite quail - 5200 ppm

Oral LC₅₀, Mallard duck - > 10,000 ppm

BEE TOXICITY: Non-toxic.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE: Pesticide wastes are acutely hazardous. Dispose of in accordance with applicable Federal, state and local laws and regulations.

CONTAINER: Refer to product label.

SECTION 14 - TRANSPORT INFORMATION

DOT CLASSIFICATION:

Ground Transport - NAFTA

Non-Bulk: Not regulated by US DOT

Tank Truck:

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil), Marine Pollutant

Hazard Class or Division: Class 9

Identification Number: UN3082

Packing Group: PGIII

Air Transport - NAFTA

Not regulated by US DOT

B/L FREIGHT CLASSIFICATION:

Fungicides, NOI, O/T Poison

COMMENTS:

Water Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil), Marine Pollutant

Hazard Class or Division: Class 9

Identification Number: UN3082

Packing Group: PGIII

IMDG EMS#: F-A, S-F

Air Transport - International

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Chlorothalonil)

Hazard Class or Division: Class 9

Identification Number: UN3082

Packing Group: PGIII

Note: Max. inner packages 5 liters; Max. single packages 450 liters

SECTION 15 - REGULATORY INFORMATION

FIFRA: All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

OSHA HAZARD COMMUNICATION STANDARD STATUS: Regulated

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III STATUS:

302 Extremely Hazardous Substance	-	NO
311/312 Hazard Categories	-	Acute Health Hazard
313 Toxic Chemicals	-	Chlorothalonil (CAS No. 1897-45-6)

CALIFORNIA PROP 65 STATUS: Listed

SECTION 16 - OTHER INFORMATION

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Arysta LifeScience North America (ALSNA) LLC's knowledge. ALSNA makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. To the extent permitted by applicable law, we disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

REVISED DATE: March 15, 2012

REVISED FOR: Changes to EPA Registration Number (Section 1)

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