

MATERIAL SAFETY DATA SHEET

FORTIX™ Fungicide
Page 1 of 5

Please read the entire document. This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information contained herein must be incorporated in your MSDS.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: FORTIX™ Fungicide
EPA REGISTRATION NUMBER(S): 66330-409
SYNONYM(S): CRY-048 Fungicide, ARY-0473-023

<u>COMPANY</u>
Arysta LifeScience North America, LLC 15401 Weston Parkway, Suite 150 Cary, NC 27513

<u>EMERGENCY TELEPHONE NUMBERS</u>	
HEALTH EMERGENCY: 1-866-303-6952, or 1-651-632-8946	SPILL EMERGENCY: 1-800-424-9300, or 1-703-527-3887

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Active Ingredient(s)/ Hazardous Inert Ingredient(s)	CAS #	Exposure Limits*	% Weight	% Volume
Fluoxastrobin: [(1E)-[2-[[6-(2-Chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy]phenyl](5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methyloxime]	361377-29-9	<u>TWA</u> ^a OSHA PEL ^b : NA ACGIH TLV ^c : NA NIOSH REL ^d : NA	14.84	NA
Flutriafol: [α-(2-fluorophenyl)-α-(4-fluorophenyl)-1H-1,2,4-triazole-1-ethanol]	76674-21-0	<u>TWA</u> ^a OSHA PEL ^b : NA ACGIH TLV ^c : NA NIOSH REL ^d : NA	19.30	NA

Only the identities of the active ingredient(s) and any hazardous inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

*Source: *Guide to Occupational Exposure Values 2008*, published by ACGIH

^a**TWA**: Time-weighted average exposure concentration for a conventional 8-hour (TLV, PEL) or up to a 10-hour (REL) workday and a 40-hour workweek.

^b**OSHA PEL**: Occupational Safety and Health Administration Permissible Exposure Limits.

^c**ACGIH TLV**: American Conference of Governmental Industrial Hygienists, Inc., Threshold Limit Values.

^d**NIOSH REL**: National Institute for Occupational Safety and Health Recommended Exposure Limits.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION:

- HARMFUL IF SWALLOWED
- WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING
- KEEP OUT OF REACH OF CHILDREN

Acute Health Hazards

Ingestion: Harmful if swallowed.

SECTION 4: FIRST AID MEASURES

Skin: Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Get medical attention if irritation persists.

Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician if irritation persists.

Ingestion: Call a physician or poison control center immediately. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Never give anything by mouth to an unconscious person.

Inhalation: Move 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 physician or poison control center immediately.

Note to Physician: Therapeutic measures: Basic aid, decontamination, symptomatic treatment.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Limits in Air (% by volume):		
	Upper:	NA
	Lower:	NA
Flash Point:		> 93 °C
	Method Used:	NDA
Autoignition Temperature:		NA
LEL/UEL:		NDA
NFPA Hazard Classification:		
	Health:	2
	Flammability:	1
	Reactivity:	0
	Other:	
Extinguishing Media:	Sprayed water jet, foam, extinguishing powder, CO ₂ , sand.	
Special Fire Fighting Procedures:	Keep out of smoke. Fight fire from upwind position. Evacuate personnel to safe areas. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.	
Hazardous Combustion Products:	In the event of fire, the formation of toxic vapors must be anticipated.	

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PHONE NUMBERS

Exposure Calls (PROSAR): 1-866-303-6952 or 1-651-632-8946 (International)

Spill Calls (CHEMTREC): 1-800-424-9300 or 1-703-527-3887

Use personal protective equipment. Do not empty into drains or waters. Take up spilled product with absorbent material and place into closable container. To clean the floor and all objects contaminated by this material, use damp cloth. Also place used cleaning materials into closable receptacles.

SECTION 7: HANDLING AND STORAGE

Store in a dry place. Keep away from food, drink and animal feeding stuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear eye protection, goggles.

Skin Protection: Wear long-sleeved shirt, long pants, protective gloves for chemicals, shoes and socks. Keep the place of work clean. Avoid contact with product. Keep working clothes separate. Change badly soiled or soaked clothing. Wash hands before breaks and at end of work.

Respiratory/Ventilation Requirements: 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Viscous off-white liquid
Odor:	Faint characteristic odor
Physical State:	Liquid suspension
pH:	6.5 – 8.0
Boiling Point:	NDA
Melting Point:	NA
Freezing Point	NDA
Vapor Pressure:	NA
Vapor Density:	NDA
Bulk Density:	9.41 lb/gal
Specific Gravity:	NDA
Evaporation Rate:	NDA
Solubility in Water:	NA
Percent Solids by Weight:	NDA
Percent Volatile:	NDA
Volatile Organic Compounds:	NDA
Molecular Weight:	NDA
Viscosity:	800 – 1200 cps @25°C

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions
Hazardous Polymerization:	NDA
Flash Point:	> 93 °C
Flammable Point:	NA
Auto Ignition:	NA
Incompatibility With Other Materials:	NA
Decomposition Products:	NDA

SECTION 11: TOXICOLOGICAL INFORMATION

Acute (based on similar product):

Oral Toxicity: LD₅₀ (rat): >2000 mg/kg

Dermal Toxicity: LD₅₀ (rat): >5050 mg/kg

Inhalation Toxicity: LC₅₀ (rat): >2.12 mg/L

Skin Irritation: Slightly irritating.

Skin Sensitization: Product is not a sensitizer or is negative for sensitization (guinea pig) (via the Buehler Test).

SECTION 12: ECOLOGICAL INFORMATION

This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. The active ingredient in this product can be persistent for several months or longer.

SECTION 13: DISPOSAL CONSIDERATIONS

Pesticide waste may be hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

SECTION 14: TRANSPORT INFORMATION

Only regulated when shipped by water or in bulk package. Describe as : UN3082, Environmentally hazardous substances, liquid, n.o.s. (Fluoxastrobin), 9, PG III, Marine Pollutant.

SECTION 15: REGULATORY INFORMATION

U.S Federal Regulations

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act): All pesticides are governed under FIFRA. Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

CERCLA (Comprehensive Response Compensation, and Liability Act): None

EMERGENCY TELEPHONE #: 1-866-303-6952 or 1-651-632-8946

MSDS Number: 00617

Issue Date: 2/06/2013

NDA = No Data Available

NA = Not Applicable

OSHA (Occupational Safety and Health Administration): This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

SARA Title III (SUPERFUND Amendments and Reauthorization Act):

Section 302 (EHS) TPQ: None

Section 304 (EHS) RQ: None

Section 311/312 CATEGORIES

1. Immediate (Acute) Health Effects; **YES**
2. Delayed (Chronic) Health Effect; **YES**
3. Fire Hazard; **NO**
4. Sudden Release of Pressure Hazard; **NO**
5. Reactivity Hazard; **NO**

TSCA (Toxic Substance Control Act): This product is exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

State Regulations: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

SECTION 16: OTHER INFORMATION

Reason for issue:	Layout change
Prepared by:	Ashley R. Brown
Issue date:	02/06/2013
Supersedes date:	01/15/2013
MSDS number:	00617

The information in this MSDS is based on data available to us as of the issue date given herein, and believed to be correct. Contact Arysta LifeScience North America LLC at (919) 678-4900 to determine if additional data and information have become available since the issue date.

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