

SECTION 1: Identification

1.1. Identification

Product form	: Mixture
Product name	: EVITO® 480 SC FUNGICIDE
Synonyms	: Fluoxastrobin 480 SC / Disarm® 480 SC
Other means of identification	: EPA Reg. No 66330-64

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: Fungicide.
Restrictions on use	: No additional information available

1.3. Details of the supplier of the safety data sheet

Arysta LifeScience North America, LLC
15401 Weston Parkway, Suite 150
Cary, NC 27513 - USA

1.4. Emergency telephone number

Emergency number	: Exposure calls (PROPHARMA): 1-866-303-6952 or +1-651-603-3432 (international) Spill calls (CHEMTREC) (Contract # CCN179): +1-800-424-9300 or +1-703-527-3887 (international)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 4 (Inhalation:dust,mist)	H332
STOT RE 1	H372
Aquatic Acute 1	H400
Full text of H statements	: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H332 - Harmful if inhaled H372 - Causes damage to organs through prolonged or repeated exposure H400 - Very toxic to aquatic life
Precautionary statements (GHS-US)	: P260 - Do not breathe mist, spray, vapours P261 - Avoid breathing mist, spray, vapours P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area P273 - Avoid release to the environment P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P312 - Call a doctor if you feel unwell P314 - Get medical advice/attention if you feel unwell P391 - Collect spillage P501 - Dispose of contents/container to Collection point

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

3.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
3.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

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3.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% (w/w)	GHS-US classification
Fluoxastrobin Technical	(CAS-No.) 361377-29-9	40.3	Acute Tox. 4 (Inhalation:dust,mist), H332 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Causes damage to organs through prolonged or repeated exposure.
- Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : No specific fire or explosion hazard.
- Reactivity : No dangerous reactions known.

5.3. Advice for firefighters

- Firefighting instructions : Do not allow run-off from fire fighting to enter drains or water courses. Exercise caution when fighting any chemical fire.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

- Protective equipment : Chemical goggles or safety glasses.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Chemical goggles or safety glasses.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Do not discharge into drains or the environment.

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6.3. Methods and material for containment and cleaning up

- For containment : Absorb and/or contain spill with inert material, then place in suitable container.
- Methods for cleaning up : Wipe up with absorbent material (for example cloth). Take up in non-combustible absorbent material and shove into container for disposal.

6.4. Reference to other sections

Section 13: disposal information. Section 7: safe handling. Section 8: personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not breathe mist, spray, vapours. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Do not store near food, foodstuffs, drugs, or potable water supplies. Store in a dry place.
- Incompatible products : None known.

7.3. Specific end use(s)

Formulations. Fungicide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

EVITO® 480 SC FUNGICIDE	
ACGIH	Not applicable
OSHA	Not applicable
Fluoxastrobin Technical (361377-29-9)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

- Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear suitable gloves resistant to chemical penetration. Wear water impervious gloves. nitrile rubber gloves. neoprene/butyl rubber. barrier laminate.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Wear water impervious or resistant protective clothing and gloves.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection. If needed, use an air-purifying respirator with organic vapor cartridges and a dust/mist prefilter.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Viscous liquid.
- Colour : Off-white
- Odour : slight
- Odour threshold : No data available
- pH : 6.8 (10% solution)
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butylacetate=1) : No data available

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Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No oxidizing properties.
Vapour pressure	: No data available
Relative density	: 1.183 @ 25 °C
Relative vapour density at 20 °C	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: 822 cSt cps @ 25 °C
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Carbon monoxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	: Skin and eye contact
Acute toxicity	: Inhalation:dust,mist: Harmful if inhaled.

EVITO® 480 SC FUNGICIDE	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	4.9 mg/l/4h
ATE US (vapours)	4.9 mg/l/4h
ATE US (dust,mist)	4.9 mg/l/4h

Fluoxastrobin Technical (361377-29-9)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	4.9 mg/l/4h
ATE US (vapours)	4.9 mg/l/4h
ATE US (dust,mist)	4.9 mg/l/4h

Skin corrosion/irritation	: Not classified (Slightly irritating to skin)
Serious eye damage/irritation	: Not classified (Not irritating to rabbits on ocular application)

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Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Causes damage to organs through prolonged or repeated exposure.

Fluoxastrobin Technical (361377-29-9)

NOAEL (oral, rat, 90 days)	1.5 mg/kg bodyweight/day liver effects
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Aspiration hazard : Not classified

Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

Fluoxastrobin Technical (361377-29-9)

LC50 fish 1	0.435 mg/l 96 h <i>Oncorhynchus mykiss</i>
LC50 other aquatic organisms 1	0.053 mg/l 96 h <i>M. bahia</i>
EC50 Daphnia 1	0.48 mg/l 48 h
LC50 fish 2	0.57 mg/l 96 h <i>Cyprinus carpio</i> ; 0.97 mg/l 96 h <i>Lepomis macrochirus</i>

12.2. Persistence and degradability

Fluoxastrobin Technical (361377-29-9)

Persistence and degradability	Not rapidly degradable.
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12.3. Bioaccumulative potential

Fluoxastrobin Technical (361377-29-9)

Bioconcentration factor (BCF REACH)	52.1
Log Pow	2.86 @ 20 °C
Bioaccumulative potential	Does not bioaccumulate significantly.

12.4. Mobility in soil

Fluoxastrobin Technical (361377-29-9)

Ecology - soil	Slightly mobile in soil.
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12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Disposal via incineration is recommended.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Non-bulk (< 119 gallons) Not regulated

Bulk (>= 119 gallons):

Transport document description : UN3082 Environmentally hazardous substances, liquid, n.o.s. (fluoxastrobin), 9, III

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s. (fluoxastrobin)

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Packing group (DOT) : III - Minor Danger
Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



Dangerous for the environment : Yes
Marine pollutant : Yes



Additional information

Emergency Response Guide (ERG) Number : 171
Other information : No supplementary information available.

Transport by sea

IMDG

Transport hazard class(es) (IMDG) : 9
:



Marine pollutant : Yes
UN-No. (IMDG) : 3082
Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (fluoxastrobin), 9, III, MARINE POLLUTANT
Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG) : III - substances presenting low danger
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F

Air transport

IATA

Transport hazard class(es) (IATA) : 9
:



Marine pollutant : Yes
UN-No. (IATA) : 3082
Transport document description (IATA) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (fluoxastrobin), 9, III
Class (IATA) : 9 - Miscellaneous Dangerous Goods
Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Fluoxastrobin Technical (361377-29-9)

EPA TSCA Regulatory Flag	Exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.
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This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.:

EPA Registration Number	66330-64
FIFRA Signal Word	CAUTION
FIFRA Hazard Statement	Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing.
FIFRA Other	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. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark, or other sensitive areas that may be exposed to spray drift. Do not contaminate water when disposing of equipment washwater or rinsate.

15.2. International regulations

CANADA

Fluoxastrobin Technical (361377-29-9)

Not listed on the Canadian DSL (Domestic Substances List) inventory.

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date	: 06/16/2017
Data sources	: European Chemicals Agency (ECHA) Registered Substances list. Accessed at http://echa.europa.eu/ . Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. OSHA 29CFR 1910.1200 Hazard Communication Standard. TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html .
Other information	: None.

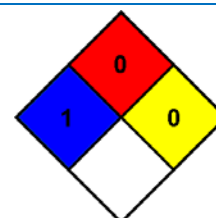
Full text of H-statements:

H332	Harmful if inhaled
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Abbreviations and acronyms:

	ACGIH (American Conference of Government Industrial Hygienists)
	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals)
	LD50: Lethal Dose for 50% of the test population
	OSHA: Occupational Safety & Health Administration
	STEL: Short Term Exposure Limits
	TSCA: Toxic Substances Control Act
	TWA: Time Weighted Average

NFPA health hazard	: 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard	: 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



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Indication of changes:

Composition/information on ingredients. GHS classification.

SDS Prepared by:

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product