

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form	: Mixture
Product name.	: Evito® 480 SC
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	: Formulations. Fungicide.
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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 (PROSAR): +1-866-303-6952 or +1-651-603-3432 (international) Spill Calls (CHEMTREC) (Contract # CCN1779): +1-800-424-9300 or +1-703-527-3887
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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
Skin Sens. 1	H317
STOT RE 1	H372
Aquatic Acute 1	H400

Full text of H-phrases: see section 16

2.2. Label elements**GHS-US labelling**

Hazard pictograms (GHS-US)



Signal word (GHS-US)	: Danger.
Hazard statements (GHS-US)	: H317 - May cause an allergic skin reaction 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/vapours/spray 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 P272 - Contaminated work clothing must not be allowed out of the workplace P273 - Avoid release to the environment P280 - Wear protective gloves/protective clothing/eye protection/face protection P302 + P352 - If on skin: Wash with plenty of water P304 + P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P314 - Get medical advice/attention if you feel unwell P321 - Specific treatment (see Section 4 on this label) P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P391 - Collect spillage P501 - Dispose of contents/container in accordance with local and national regulations

2.3. Other hazards

No additional information available

Evito® 480 SC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.4. Unknown acute toxicity (GHS-US)

- 3 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral).
- 3 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal).
- 3 percent 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. Mixture

Components with health hazards above the applicable thresholds are shown.

Name	Product identifier	%	GHS-US classification
Fluoxastrobin (main constituent)	(CAS No) 361377-29-9	40.3	Acute Tox. 4 (Inhalation:dust,mist), H332 STOT RE 1, H372 Aquatic Acute 1, H400
1,2-benzisothiazolone	(CAS No) 2634-33-5	0.1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317
2-methyl-2H-isothiazol-3-one	(CAS No) 2682-20-4	0.1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400

Full text of H-phrases: 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.
- 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/doctor/physician if you feel unwell.

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

- Symptoms/injuries : Causes damage to organs through prolonged or repeated exposure.
- Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation.;Harmful if inhaled
- Symptoms/injuries after skin contact : May cause an allergic skin reaction.

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.

Evito® 480 SC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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.

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, vapours, spray.
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/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.
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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Evito® 480 SC	
ACGIH	Not applicable
OSHA	Not applicable
1,2-benzisothiazolone (2634-33-5)	
ACGIH	Not applicable
OSHA	Not applicable
2-methyl-2H-isothiazol-3-one (2682-20-4)	
ACGIH	Not applicable
OSHA	Not applicable
Fluoxastrobin (361377-29-9)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Appropriate engineering controls : Avoid creating mist or spray. Avoid splashing. Ensure good ventilation of the work station.
Personal protective equipment : Avoid all unnecessary exposure.
Hand protection : It is a good industrial hygiene practice to minimize skin contact. Wear suitable gloves. nitrile rubber gloves.

Evito® 480 SC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear water impervious or resistant protective clothing and gloves. Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves made of any waterproof material, such as nitrile, butyl, neoprene and/or barrier laminate. These are only some of the glove materials that are chemically resistant to this product. For more options, refer to category A on an EPA chemical resistance category selection chart.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Use an approved respirator equipped with oil/mist cartridges.

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 latex paint odor
Odour threshold	: No data available
pH	: 6.8 (10% solution)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.1 g/cc @ 20 °C
Solubility	: Water: Solubility in water of component(s) of the mixture : • Fluoxastrobin: 2.43 mg/l @ 20 °C pH 4; 2.29 mg/l @ 20 °C pH 7; 2.27 mg/l @ 20 °C pH 9
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: 822 cSt cps @ 25 °C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No oxidizing properties.
Explosive limits	: 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.

Evito® 480 SC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation:dust/mist: Harmful if inhaled.

Evito® 480 SC	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	4.9 mg/l
1,2-benzisothiazolone (2634-33-5)	
ATE US (oral)	500.000 mg/kg bodyweight
2-methyl-2H-isothiazol-3-one (2682-20-4)	
ATE US (oral)	100.000 mg/kg bodyweight
ATE US (dermal)	300.000 mg/kg bodyweight
Fluoxastrobin (361377-29-9)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 2170 mg/m ³

Skin corrosion/irritation : Not classified (Slightly irritating to skin)
Serious eye damage/irritation : Not classified (Not irritating to rabbits on ocular application)
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified
negative in a battery of laboratory tests (fluoxastrobin technical)
No evidence of carcinogenicity (fluoxastrobin technical)

Reproductive toxicity : Not classified
No effects on reproduction (fluoxastrobin technical)

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure.

Fluoxastrobin (361377-29-9)	
NOAEL (oral,rat,90 days)	1.5 mg/kg bodyweight/day liver effects
Aspiration hazard	: Not classified
Symptoms/injuries after skin contact	: May cause an allergic skin reaction.
Likely routes of exposure	: Skin and eyes contact

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

Fluoxastrobin (361377-29-9)	
LC50 fishes 1	0.435 mg/l 96 h Oncorhynchus mykiss
LC50 other aquatic organisms 1	0.053 mg/l 96 h M. bahia
EC50 Daphnia 1	0.48 mg/l 48 h
LC50 fish 2	0.57 mg/l 96 h Cyprinus carpio ; 0.97 mg/l 96 h Lepomis macrochirus

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Fluoxastrobin (361377-29-9)	
Bioconcentration factor (BCF REACH)	52.1
Log Pow	2.86 @ 20 °C

12.4. Mobility in soil

Fluoxastrobin (361377-29-9)	
Ecology - soil	Slightly mobile in soil.

12.5. Other adverse effects

Effect on ozone layer : No known ecological damage caused by this product.

Effect on the global warming : No known ecological damage caused by this product.

Evito® 480 SC

Safety Data Sheet

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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

In accordance with DOT
Not considered a dangerous good for transport regulations

Additional information

Other information : No supplementary information available.

ADR

- Transport document description : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluoxastrobin), 9, III, (E)
Packing group (ADR) : III
Class (ADR) : 9 - Miscellaneous dangerous substances and articles
Hazard identification number (Kemler No.) : 90
Classification code (ADR) : M6
Danger labels (ADR) : 9 - Miscellaneous dangerous compounds



Orange plates :



- Tunnel restriction code (ADR) : E
LQ : 5L
Excepted quantities (ADR) : E1

Transport by sea

- UN-No. (IMDG) : 3082
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluoxastrobin)
Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG) : III - substances presenting low danger
Marine Pollutant : Yes



Air transport

- UN-No. (IATA) : 3082
Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluoxastrobin)
Class (IATA) : 9 - Miscellaneous Dangerous Goods
Packing group (IATA) : III - Minor Danger

Evito® 480 SC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Marine Pollutant

: Yes



SECTION 15: Regulatory information

15.1. US Federal regulations

1,2-benzisothiazolone (2634-33-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-methyl-2H-isothiazol-3-one (2682-20-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Fluoxastrobin (361377-29-9)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Evito® 480 SC

WHMIS Classification

Class D Division 2 Subdivision B - Toxic material causing other toxic effects

1,2-benzisothiazolone (2634-33-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Fluoxastrobin (361377-29-9)

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

EU-Regulations

1,2-benzisothiazolone (2634-33-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Fluoxastrobin (361377-29-9)

Not listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Inhalation:dust,mist) H332

Skin Sens. 1 H317

STOT RE 1 H372

Aquatic Acute 1 H400

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Xn; R20

R43

N; R50

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

15.4. US EPA – FIFRA Regulations

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.

Signal word (FIFRA)

: CAUTION.

Hazard statements (FIFRA)

: Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Avoid contact with skin, eyes or clothing.

Evito® 480 SC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- Environmental hazards : 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.
- Physical or Chemical hazards : None

SECTION 16: Other information

- Indication of changes : Original Document.
- Data sources : European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>.
Kristen 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>.
- 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 Weight Average.
- Other information : None.

Full text of H-phrases::

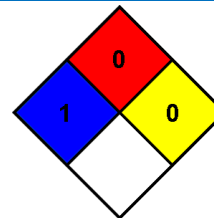
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1B	skin corrosion/irritation Category 1B
Skin Irrit. 2	skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitisation Category 1
Skin Sens. 1B	Skin sensitisation Category 1B
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life

Evito® 480 SC

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

NFPA health hazard	: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



SDS US (GHS HazCom 2012)

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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.