

Safety Data Sheet

Votivo FS

(EPA Reg. No. 7969-437)

Revision date : 2020/04/22

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Version: 2.0

(30703284/SDS_CPA_US/EN)

1. Identification

Product identifier used on the label

Votivo FS

Recommended use of the chemical and restriction on use

Recommended use*: crop protection product, insecticide

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF Agricultural Solutions US LLC
2 TW Alexander Drive
Research Triangle Park, NC 27713 USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Substance number: 895969

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

Micro-organisms may have the potential to provoke sensitising reactions.

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3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Bacillus firmus

Content (W/W): 21.5 %

Synonym: No data available.

Propylene glycol

CAS Number: 57-55-6

Content (W/W): 20.0 - 25.0%

Synonym: Propylene glycol

Sulfuric acid, zinc salt (1:1), monohydrate

CAS Number: 7446-19-7

Content (W/W): 5.0 - 7.0%

Synonym: No data available.

Distillates (petroleum), hydrotreated heavy naphthenic

CAS Number: 64742-52-5

Content (W/W): 1.0 - 3.0%

Synonym: TUFFLO PROCESS OIL 500

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

If on skin:

Wash thoroughly with soap and water

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Symptomatic treatment (decontamination, vital functions).

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5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, nitrogen oxides
The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

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Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

No data available.

Protect from temperatures below: 2 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

Protect from temperatures above: 25 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

Distillates (petroleum),
hydrotreated heavy
naphthenic

ACGIH TLV

;

Exposure by all routes should be carefully controlled to levels as low as possible.

;

Included in the regulation, but with no data values

- See the regulation for further details

TWA value 5 mg/m³ Inhalable fraction ;

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

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General safety and hygiene measures:

Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	liquid
Odour:	slight odour, of petroleum
Odour threshold:	Not determined due to potential health hazard by inhalation.
Colour:	dark brown
pH value:	approx. 4.7 - 6.7 (100 %(m), 23 °C)
Melting point:	The product has not been tested.
Boiling point:	The product has not been tested.
Flash point:	> 100 °C
Flammability:	not applicable
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Vapour pressure:	The product has not been tested.
Density:	approx. 1.148 g/cm ³ (20.7 °C)
Vapour density:	not applicable
Partitioning coefficient n-octanol/water (log Pow):	not applicable
<i>Information on: Propylene glycol</i>	
Partitioning coefficient n-octanol/water (log Pow):	-1.07 (20.5 °C)

Self-ignition temperature:	Based on its structural properties the product is not classified as self-igniting.
Thermal decomposition:	not determined
Viscosity, dynamic:	500 - 650 mPa.s (25 °C)
Solubility in water:	dispersible
Evaporation rate:	not applicable
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

(Directive
92/69/EEC, A.8)

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

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not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid

See SDS section 7 - Handling and storage.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
not determined

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50

Species: rat (female)

Value: > 2,000 mg/kg (OECD Guideline 425)

No mortality was observed.

Inhalation

Type of value: LC50

Species: rat (male/female)

Value: > 3.83 mg/l (OECD Guideline 403)

Exposure time: 4 h

An aerosol was tested.

Highest concentration available for testing. No mortality was observed.

Type of value: LC50

Species: rat (male/female)

Value: > 15.32 mg/l (OECD Guideline 403)

Exposure time: 1 h

An aerosol was tested.

Highest concentration available for testing.

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Dermal

Type of value: LD50
Species: rat (male/female)
Value: > 2,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Assessment other acute effects

Assessment of STOT single:
The available information is not sufficient for the evaluation of specific target organ toxicity.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the eyes. Not irritating to the skin.

Skin

Species: guinea pig
Result: non-irritant
Method: OECD Guideline 404

Eye

Species: rabbit
Result: Slightly irritating.
Method: OECD Guideline 405

Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

Species: mouse
Result: Non-sensitizing.
Method: OECD Guideline 429

Aspiration Hazard

no classification possible (no data available)

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Bacillus firmus strain I-1582

Assessment of repeated dose toxicity: No substance-specific organotoxicity was observed after repeated administration to animals.

Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Bacillus firmus strain I-1582

Assessment of mutagenicity: Based on the ingredients, there is no suspicion of a mutagenic effect.

Carcinogenicity

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Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Bacillus firmus strain I-1582

Assessment of carcinogenicity: Based on the ingredients there is no suspicion of a carcinogenic effect in humans.

Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Bacillus firmus strain I-1582

Assessment of reproduction toxicity: Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Bacillus firmus strain I-1582

Assessment of teratogenicity: Based on the ingredients, there is no suspicion of a teratogenic effect.

Other Information

Misuse can be harmful to health.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

Information on: BACILLUS FIRMUS I-1582 TK FE_pr

*LC50 (96 h) > 100 mg/l (> 1,05*10¹⁰ CFU/L), Oncorhynchus mykiss (OECD 203; ISO 7346; 92/69/EEC, C.1, static)*

Aquatic invertebrates

Information on: BACILLUS FIRMUS I-1582 TK FE_pr

*EC50 (48 h) > 100 mg/l (> 1,05*10¹⁰ CFU/L), Daphnia magna (OECD Guideline 202, part 1, static)*

Aquatic plants

Information on: BACILLUS FIRMUS I-1582 TK FE_pr

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EC50 (72 h) 24.2 mg/l (17.2*10⁸ CFU/L) (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)
EC10 (72 h) 12.12 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)

Chronic toxicity to aquatic invertebrates

Information on: BACILLUS FIRMUS I-1582 TK FE_pr
No observed effect concentration (21 d) 1,04*10⁸ CFU/L, *Daphnia magna* (other, semistatic)
Limit concentration test only (LIMIT test).

Persistence and degradability

Assessment biodegradation and elimination (H2O)

The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment biodegradation and elimination (H2O)

Information on: *Bacillus firmus* strain I-1582

not applicable

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential

Information on: *Bacillus firmus* strain I-1582

Mobility in soil

Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: *Bacillus firmus* strain I-1582

not applicable

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Must be sent to a suitable incineration plant, observing local regulations.

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Container disposal:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Crop Protection TSCA, US released / exempt

Chemical TSCA, US blocked / not listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

EPCRA 313:

CAS Number

7446-19-7

Chemical name

Sulfuric acid, zinc salt (1:1), monohydrate

CERCLA RQ

1000 LBS

CAS Number

7446-19-7

Chemical name

Sulfuric acid, zinc salt (1:1), monohydrate

State regulations

State RTK

NJ

CAS Number

57-55-6

Chemical name

Propylene glycol

7446-19-7

Sulfuric acid, zinc salt (1:1), monohydrate

64742-52-5

Distillates (petroleum), hydrotreated heavy naphthenic

PA

57-55-6

Propylene glycol

7446-19-7

Sulfuric acid, zinc salt (1:1), monohydrate

64742-52-5

Distillates (petroleum), hydrotreated heavy naphthenic

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

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Labeling requirements under FIFRA

This chemical is a pesticide product registered by the 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, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:
KEEP OUT OF REACH OF CHILDREN.

Causes eye irritation.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

16. Other Information

SDS Prepared by:

BASF Agricultural Solutions US NA Product Regulations

SDS Prepared on: 2020/04/22

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
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