

SAFETY DATA SHEET



EXTERIS™ STRESSGARD®

Version 2.0 / USA
102000028297

1/11
Revision Date: 06/09/2016
Print Date: 06/10/2016

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name EXTERIS™ STRESSGARD®

Product code (UVP) 81701563

SDS Number 102000028297

EPA Registration No. 432-1536

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

Use Fungicide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Skin sensitisation: Category 1B

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

May cause an allergic skin reaction.

Precautionary statements

Avoid breathing mist and spray.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

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IF ON SKIN: Wash with plenty of water/ soap.
If skin irritation or rash occurs: Get medical advice/ attention.
Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.
Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Concentration % by weight |
|----------------------------|-------------|---------------------------|
| Fluopyram | 658066-35-4 | 1.19 |
| Trifloxystrobin | 141517-21-7 | 1.92 |
| Trade Secret Ingredient(s) | | 11.1 |

Identity and specific percent composition of one or more Trade Secret materials is being withheld.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|---|
| General advice | When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment. |
| 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. |
| Skin contact | Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately. |
| Eye contact | 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 or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended. |

Most important symptoms and effects, both acute and delayed

Symptoms No symptoms known or expected.

Indication of any immediate medical attention and special treatment needed

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| Treatment | Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote. |
|------------------|---|

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

| | |
|-----------------|--|
| Suitable | Water spray, Carbon dioxide (CO ₂), Foam, Dry chemical |
|-----------------|--|

| | |
|-------------------|-----------------------|
| Unsuitable | High volume water jet |
|-------------------|-----------------------|

| | |
|--|---|
| Special hazards arising from the substance or mixture | Dangerous gases are evolved in the event of a fire. |
|--|---|

Advice for firefighters

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| Special protective equipment for firefighters | Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing. |
|--|--|

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| Further information | Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. |
|----------------------------|--|

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|--------------------|-----------|
| Flash point | > 93.3 °C |
|--------------------|-----------|

| | |
|----------------------------------|-------------------|
| Auto-ignition temperature | No data available |
|----------------------------------|-------------------|

| | |
|------------------------------|-------------------|
| Lower explosion limit | No data available |
|------------------------------|-------------------|

| | |
|------------------------------|-------------------|
| Upper explosion limit | No data available |
|------------------------------|-------------------|

| | |
|--------------------|---------------|
| Explosivity | Not explosive |
|--------------------|---------------|

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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| Precautions | Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. |
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Methods and materials for containment and cleaning up

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|--------------------------------|--|
| Methods for cleaning up | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean floors and contaminated objects with plenty of water. |
|--------------------------------|--|

| | |
|--------------------------|--|
| Additional advice | Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal. |
|--------------------------|--|

| | |
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| Reference to other sections | Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13. |
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SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing. Keep away from direct sunlight.

Advice on common storage Keep away from food, drink and animal feedingsuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|---|-------------|-----------------------------------|---------|----------|
| Fluopyram | 658066-35-4 | 0.34 mg/m ³ (TWA) | | OES BCS* |
| Trifloxystrobin | 141517-21-7 | 2.7 mg/m ³ (SK-SEN) | | OES BCS* |
| 1,2-Propanediol | 57-55-6 | 500ppb (ST ESL) | 03 2014 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 100ug/m ³ (AN ESL) | 03 2014 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 1000ug/m ³ (ST ESL) | 03 2014 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 50ppb (AN ESL) | 03 2014 | TX ESL |
| 1,2-Propanediol (Aerosol.) | 57-55-6 | 10 mg/m ³ (TWA) | 2010 | WEEL |
| Polyethylene-polypropylene copolymer | 9003-11-6 | 100ug/m ³ (AN ESL) | 03 2014 | TX ESL |
| Polyethylene-polypropylene copolymer | 9003-11-6 | 1000ug/m ³ (ST ESL) | 03 2014 | TX ESL |

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection 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.

Hand protection Chemical resistant nitrile rubber gloves

Eye protection Safety glasses with side-shields
or
Goggles

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--|
| Appearance | green |
| Physical State | liquid suspension |
| Odor | characteristic |
| Odour Threshold | No data available |
| pH | 6.0 at 100 % (23 °C) |
| Vapor Pressure | No data available |
| Vapor Density (Air = 1) | No data available |
| Density | 1.05 g/cm ³ at 20 °C |
| Evaporation rate | No data available |
| Boiling Point | No data available |
| Melting / Freezing Point | No data available |
| Water solubility | miscible |
| Minimum Ignition Energy | Not applicable |
| Decomposition temperature | No data available |
| Partition coefficient: n-octanol/water | Not applicable |
| Viscosity | 60 - 200 mPaxs at 20 °C Velocity gradient 20 /s 25 - 75 mPaxs at 20 °C Velocity gradient 100 /s |

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| | |
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| Flash point | > 93.3 °C |
| Auto-ignition temperature | No data available |
| Lower explosion limit | No data available |
| Upper explosion limit | No data available |
| Explosivity | Not explosive |
| Other information | Further safety related physical-chemical data are not known. |

SECTION 10: STABILITY AND REACTIVITY

Reactivity

| | |
|---|--|
| Thermal decomposition | No data available |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | Extremes of temperature and direct sunlight. freezing |
| Incompatible materials | No data available |
| Hazardous decomposition products | No decomposition products expected under normal conditions of use. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|---|---|
| Exposure routes | Ingestion, Eye contact, Skin contact, Inhalation |
| Immediate Effects | |
| Eye | Moderate eye irritation. |
| Skin | May cause slight irritation. |
| Ingestion | Harmful if swallowed. |
| Information on toxicological effects | |
| Acute oral toxicity | LD50 (female Rat) > 5,000 mg/kg |
| Acute inhalation toxicity | LC50 (male/female combined Rat) > 4.62 mg/l Highest attainable concentration. Determined in the form of a respirable aerosol. |
| Acute dermal toxicity | LD50 (male/female combined Rat) > 5,000 mg/kg |
| Skin irritation | slight irritation (Rabbit) |
| Eye irritation | Mild eye irritation. (Rabbit) |

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SECTION 12: ECOLOGICAL INFORMATION

| | |
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| Toxicity to fish | LC50 (Oncorhynchus mykiss (rainbow trout)) > 2.0 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient fluopyram. LC50 (Oncorhynchus mykiss (rainbow trout)) 0.015 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient trifloxystrobin. |
| Toxicity to aquatic invertebrates | EC50 (Daphnia magna (Water flea)) > 20.0 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient fluopyram. EC50 (Daphnia magna (Water flea)) 0.016 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient trifloxystrobin. |
| Toxicity to aquatic plants | EC50 (Raphidocelis subcapitata (freshwater green alga)) 8.9 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient fluopyram. EC50 (Desmodesmus subspicatus (green algae)) 0.0053 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient trifloxystrobin. |
| Biodegradability | Fluopyram: Not rapidly biodegradable Trifloxystrobin: Not rapidly biodegradable |
| Koc | Fluopyram: Koc: 279 Trifloxystrobin: Koc: 2377 |
| Bioaccumulation | Fluopyram: Bioconcentration factor (BCF) 18 Does not bioaccumulate. Trifloxystrobin: Bioconcentration factor (BCF) 431 Does not bioaccumulate. |
| Mobility in soil | Fluopyram: Moderately mobile in soils Trifloxystrobin: Slightly mobile in soils |
| Additional ecological information | No other effects to be mentioned. |
| Environmental precautions | Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label. |

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

| | |
|-------------------------------|--|
| Product | Dispose in accordance with all local, state/provincial and federal regulations. 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. |
| Contaminated packaging | Do not re-use empty containers. Follow advice on product label and/or leaflet. |
| RCRA Information | Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply. |

SECTION 14: TRANSPORT INFORMATION

| | |
|--------------------------|---|
| 49CFR | Not dangerous goods / not hazardous material |
| IMDG | |
| UN number | 3082 |
| Class | 9 |
| Packaging group | III |
| Marine pollutant | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION) |
| IATA | |
| UN number | 3082 |
| Class | 9 |
| Packaging group | III |
| Environm. Hazardous Mark | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIFLOXYSTROBIN SOLUTION) |

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15: REGULATORY INFORMATION

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EPA Registration No. 432-1536

US Federal Regulations

TSCA list

None.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

None.

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

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 for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

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Signal word: Caution!

Hazard statements: Harmful if swallowed.
Moderate eye irritation.
Avoid contact with skin, eyes and clothing.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove and wash contaminated clothing before re-use.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

| | |
|---------|---|
| 49CFR | Code of Federal Regulations, Title 49 |
| ACGIH | US. ACGIH Threshold Limit Values |
| ATE | Acute toxicity estimate (ATE) |
| CAS-Nr. | Chemical Abstracts Service number |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| IARC | US. IARC Monographs on Occupational Exposures to Chemical Agents |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| N.O.S. | Not otherwise specified |
| NTP | US. National Toxicology Program (NTP) Report on Carcinogens |
| OECD | Organization for Economic Co-operation and Development |
| TDG | Transportation of Dangerous Goods |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Instability - 1 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 2 Flammability - 1 Physical Hazard - 1 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

Revision Date: 06/09/2016

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