1. Identification

Product identifier used on the label

SERCADIS XEMIUM BRAND FUNGICIDE

Recommended use of the chemical and restriction on use
Recommended use*: fungicide

* 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 CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Contact address: BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1
CANADA
Telephone: +1 289 360-1300

Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification
PCP # 31697
Synonyms: Fluxapyroxad

2. Hazards Identification

According to Controlled Products Regulations (CPR) (SOR/88-66)

Emergency overview

CAUTION:
Contains 1,2-benzisothiazolin-3-one as a preservative.
Contains 2-methyl-4-isothiazolin-3-one as a preservative.
Contains 2-bromo-2-nitropropane-1,3-diol as a preservative.
Contains the allergen soy.
KEEP OUT OF REACH OF CHILDREN.
3. Composition / Information on Ingredients

According to Controlled Products Regulations (CPR) (SOR/88-66)

Not WHMIS controlled.

4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

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:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

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

Unsuitable extinguishing media for safety reasons:
water jet
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:
Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

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
Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

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:
The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds.

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. Protect from temperatures below: 0 °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: 40 °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.

Advice on system design:
Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. 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.

General safety and hygiene measures:
Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Remove contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form:</td>
<td>suspension</td>
</tr>
<tr>
<td>Odour:</td>
<td>faint odour, fruity</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined due to potential health hazard by inhalation.</td>
</tr>
<tr>
<td>Colour:</td>
<td>off-white, pink tint</td>
</tr>
<tr>
<td>pH value:</td>
<td>approx. 6 - 8 (1 %%(m), approx. 20 °C)</td>
</tr>
<tr>
<td></td>
<td>(pH Meter)</td>
</tr>
<tr>
<td>Crystallization temperature:</td>
<td>-5.5 °C  (measured)</td>
</tr>
<tr>
<td>Boiling point:</td>
<td>approx. 100 °C</td>
</tr>
<tr>
<td>Information applies to the solvent.</td>
<td></td>
</tr>
</tbody>
</table>
## 10. Stability and Reactivity

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

Oxidizing properties:
not fire-propagating (Directive 2004/73/EC, A.21)

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

### Possibility of hazardous reactions
The product is chemically stable. Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

### Conditions to avoid

### 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:
Possible thermal decomposition products:
carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrocarbons, hydrogen fluoride, halogenated hydrocarbons
Stable at ambient temperature. If product is heated above decomposition temperature, toxic vapours will be released.

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

Oral
Type of value: LD50
Species: rat (female)
Value: > 2,000 mg/kg (OECD Guideline 423)
No mortality was observed.

Inhalation
Type of value: LC50
Species: rat (male/female)
Value: > 5.9 mg/l (OECD Guideline 403)
Exposure time: 4 h
An aerosol with respirable particles was tested.
No mortality was observed.

Dermal
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Irritation / corrosion
Assessment of irritating effects: May cause slight but temporary irritation to the eyes. May cause slight irritation to the skin.

Skin
Species: rabbit
Result: Slightly irritating.

Eye
Species: rabbit
Result: Minimally irritating.

Sensitization
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Buehler test
Species: guinea pig
Result: Skin sensitizing effects were not observed in animal studies.
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.

Genetic toxicity
Assessment of mutagenicity: Mutagenicity tests revealed no genotoxic potential. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Fluxapyroxad
Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammals.

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

Information on: Fluxapyroxad
Assessment of carcinogenicity: Limited evidence of a carcinogenic effect.

Reproductive toxicity
Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Teratogenicity
Assessment of teratogenicity: Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals. The product has not been tested. The statement has been derived from the properties of the individual components.

Other Information
Misuse can be harmful to health.

Symptoms of Exposure
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Medical conditions aggravated by overexposure
Individuals with pre-existing diseases of the respiratory system, skin or eyes may have increased susceptibility to excessive exposures.

12. Ecological Information

Toxicity
Aquatic toxicity
Assessment of aquatic toxicity:
Very toxic (acute effect) to fish. There is a high probability that the product is not acutely harmful to aquatic invertebrates. Acutely harmful for aquatic plants.

**Toxicity to fish**
LC50 (96 h) 0.97 mg/l, Cyprinus carpio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)
Nominal concentration.

**Aquatic invertebrates**
EC50 (48 h) 109.2 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
Nominal concentration.

**Aquatic plants**
EC50 (72 h) 13.12 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Nominal concentration.

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

### 13. Disposal considerations

**Waste disposal of substance:**
See product label for disposal and recycling instructions.

**Container disposal:**
Rinse the container or liner as needed for disposal. Add rinsate to spray tank. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Consult the product label for additional details.

### 14. Transport Information

**Land transport**
TDG
Not classified as a dangerous good under transport regulations

**Sea transport**
IMDG
| Hazard class | III |
| ID number    | UN 3082 |
| Hazard label | 9, EHSM |
| Marine pollutant | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FLUXAPYROXAD) |

**Air transport**
IATA/ICAO
| Hazard class | III |
| ID number    | UN 3082 |
| Hazard label | 9, EHSM |
15. Regulatory Information

**Federal Regulations**

Registration status:
- Chemical DSL, CA blocked / not listed
- Crop Protection DSL, CA released / listed

**According to Controlled Products Regulations (CPR) (SOR/88-66)**

Not WHMIS controlled.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

16. Other Information

**SDS Prepared by:**
BASF NA Product Regulations
SDS Prepared on: 2015/09/24

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