

**SAFETY DATA SHEET**  
**Beleaf® 50 SG Insecticide**

**SDS # :** 6225-A  
**Revision date:** 2018-10-25  
**Format:** NA  
**Version** 1.09



**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** Beleaf® 50 SG Insecticide

**Other means of identification**

**Product Code(s)** 6225-A

**Synonyms** FLONICAMID: N-cyanomethyl-4-(trifluoromethyl)nicotinamide (IUPAC name);  
N-(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide (CAS name)

**Active Ingredient(s)** Flonicamid

**Chemical Family** Pyridinecarboxamide Insecticide

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** Insecticide

**Restrictions on Use:** Use as recommended by the label.

**Supplier Address**

FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

**Emergency telephone number**

For leak, fire, spill or accident emergencies, call:  
1 800 / 424-9300 (CHEMTREC - U.S.A.)  
1 703 / 741-5970 (CHEMTREC - International)  
1 703 / 527-3887 (CHEMTREC - Alternate)

Medical Emergencies:  
1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)  
1 651 / 632-6793 (ProPharma Group - All Other Countries - Collect)

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Specific target organ toxicity (single exposure)	Category 2
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GHS Label elements, including precautionary statements**EMERGENCY OVERVIEW****Warning****Hazard Statements**

H371 - May cause damage to organs

**Precautionary Statements - Prevention**

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

P308 + P311 - If exposed or concerned: Call a POISON CENTER or doctor

**Precautionary Statements - Storage**

P405 - Store locked up

**Precautionary Statements - Disposal**

P501 - Dispose of contents/container according to label directions

**Hazards not otherwise classified (HNOC)**

No hazards not otherwise classified were identified.

**Other Information**

May cause moderate eye irritation. May form combustible dust concentrations in air.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Chemical Family** Pyridinecarboxamide Insecticide.

Chemical name	CAS-No	Weight %
Flonicamid	158062-67-0	50
Dioctyl sodium sulfosuccinate	577-11-7	<1
Formaldehyde condensate	68425-94-5	1 - 15

Synonyms are provided in Section 1.

**4. FIRST AID MEASURES****Eye Contact**

Hold eyes 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. Call a poison control center or doctor for further treatment advice.

**Skin Contact**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

<b>Inhalation</b>	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 poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not induce vomiting or give anything by mouth to an unconscious person.
<b>Most important symptoms and effects, both acute and delayed</b>	None known.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical. If necessary: Use water spray or fog; do not use straight streams.
<b>Specific Hazards Arising from the Chemical</b>	Combustible material
<b>Hazardous Combustion Products</b>	Thermal decomposition can lead to release of irritating and toxic gases and vapors.
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	No information available.
<b>Sensitivity to Static Discharge</b>	No information available.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate upwind.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	For personal protection see section 8. Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection.
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	Keep people and animals away from and upwind of spill/leak.
<b>Methods for Containment</b>	Cover powder spill with plastic sheet or tarp to minimize spreading. Use a wet sweeping compound or water to prevent dust formation. Dike far ahead of spill to collect runoff water. Vacuum, shovel or pump waste into a drum and label contents for disposal.
<b>Methods for cleaning up</b>	Clean and neutralize spill area, tools and equipment by washing with water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. Reference to other sections.
<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep/store only in original container.
<b>Incompatible products</b>	None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parametersAppropriate engineering controls

**Engineering measures** Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment

**Eye/Face Protection** For dust, splash, mist or spray exposure, wear chemical protective goggles.

**Skin and Body Protection** Wear long-sleeved shirt, long pants, socks, and shoes.

**Hand Protection** Protective gloves

**Respiratory Protection** For dust, splash, mist or spray exposures, wear a filtering mask.

**Hygiene measures** Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

**General information** If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<b>Appearance</b>	Granules, Light brown
<b>Physical State</b>	Dry powder
<b>Color</b>	Light brown
<b>Odor</b>	Mild
<b>Odor threshold</b>	No information available
<b>pH</b>	6.0 @ 25°C (1% solution)
<b>Melting point/freezing point</b>	Not applicable
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	Not applicable
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Relative density</b>	33.5 lb/cu ft (loose); 37.2 lb/cu ft (tapped)
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Molecular weight</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

**Reactivity** None under normal use conditions.

**Chemical Stability** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions** None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** Heat, flames and sparks

**Incompatible materials** None known.

**Hazardous Decomposition Products** Thermal decomposition can lead to release of irritating gases and vapors.

**11. TOXICOLOGICAL INFORMATION**

Product Information

**LD50 Oral** > 2,000 mg/kg (rat)

**LD50 Dermal** Similar material: > 2,000 mg/kg (rat)

**LC50 Inhalation** > 5.36 mg/L 4 hr (rat)

**Serious eye damage/eye irritation** Moderately irritating.

**Skin corrosion/irritation** Non-irritating during normal use (rabbit).

**Sensitization** Based on a similar formulation, this product is not expected to produce skin sensitization.

Information on toxicological effects

**Symptoms** No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Chronic toxicity** Flonicamid: Repeated contact may cause allergic reactions in very susceptible persons.

**Mutagenicity** Flonicamid: Not genotoxic in laboratory studies.

**Carcinogenicity** Flonicamid: Suggestive evidence of carcinogenicity (mouse bronchioloalveolar tumors), but not sufficient to assess human carcinogenic potential.

**Neurological effects** Flonicamid: Not neurotoxic.

**Reproductive toxicity** Flonicamid: No toxicity to reproduction in animal studies.

**Developmental toxicity** Flonicamid: Not teratogenic in animal studies.

**STOT - single exposure** May cause damage to organs: See listed target organs below.

**STOT - repeated exposure** Not classified.

**Target organ effects** Flonicamid: Liver, kidney, Hematopoietic system.

**Neurological effects** Flonicamid: Not neurotoxic.

**Aspiration hazard** No information available.

**12. ECOLOGICAL INFORMATION**

Ecotoxicity

Flonicamid (158062-67-0)				
Active Ingredient(s)	Duration	Species	Value	Units

Flonicamid Technical	96 h LC50	Fish	>100	mg/L
	48 h EC50	Crustacea	>100	mg/L
	96 h EC50	Algae	>100	mg/L
	21 d NOEC	Fish	10	mg/L
	21 d NOEC	Crustacea	3.1	mg/L

**Persistence and degradability** Flonicamid: Non-persistent. Does not readily hydrolyze. Readily biodegradable (meets the >70% reduction in ≤ 28 days).

**Bioaccumulation** Flonicamid: The substance does not have a potential for bioconcentration.

**Mobility** Flonicamid: Very mobile; has potential to reach groundwater.

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** Can be incinerated, when in compliance with local regulations. The appropriate regulatory agencies should be contacted prior to disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.

**Contaminated Packaging** Dispose of in accordance with local regulations. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. When completely empty, offer for recycling if available, or dispose of bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions. Do not reuse or refill this container.

**14. TRANSPORT INFORMATION**

**DOT** This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

**TDG** Not regulated in transportation.

**ICAO/IATA** Not regulated in transportation.

**IMDG/IMO** Not regulated in transportation.

**15. REGULATORY INFORMATION**

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic health hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21

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SDS # : 6225-A  
 Revision date: 2018-10-25  
 Version 1.09

and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Formaldehyde 50-00-0	100 lb			X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Formaldehyde 50-00-0	100 lb 45.4 kg	100 lb

**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 as required on the pesticide label:*

**CAUTION**

*Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation*

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations****International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Diocetyl sodium sulfosuccinate 577-11-7	X	X	X	X	X	X	X	X
Formaldehyde condensate 68425-94-5				X				

Chemical name	Mexico - Pollutant Release and Transfer Register - Reporting Emissions for Fabrication, Process or Use -Threshold Quantities	Pollutant Release and Transfer Register - Reporting Emissions - Threshold Quantities
Formaldehyde	100 2500 kg/yr	100 kg/yr

**WHMIS Statement**

This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

**WHMIS Hazard Class**

Non-controlled

**16. OTHER INFORMATION**

NFPA	Health Hazards 1	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 1	Flammability 1	Physical hazard 0	Personal Protection X
NFPA/HMIS Ratings Legend                      Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0				

Revision date:                                      2018-10-25  
 Reason for revision:                            (M)SDS sections updated

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**End of Safety Data Sheet**