



SAFETY DATA SHEET

NATULAR® XRT

Effective Date: 10 March 2025

v.03

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SECTION 1. Identification of the Substance/Mixture and of the Company

Product Identifier

Formulation Identifier: Natular® XRT

EPA Registration Number: 8329-84

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses: Insecticide for control of mosquito and midge larvae

Uses Advised Against: See product label for use restrictions.

Details of the Supplier of the Safety Data Sheet

Clarke Mosquito Control Products, Inc.

675 Sidwell Court

St. Charles, IL 60174 U.S.A.

+1 (630) 894-2000

Email: clarke@clarke.com

Emergency Telephone Number

24-Hour Medical Emergency: POISON CONTROL Toll-free (800) 214-7753

24-Hour Transportation Emergency: INFOTRAC (800) 535-5053

SECTION 2. Hazards Identification

United States (US)

According to OSHA 29 CFR 1910.1200 HCS (2012)

Classification of the Substance or Mixture

Hazard Symbol(s): None

Signal Word: None

Hazard statements: None

Precautionary Statements: None

Other Hazards Not Classifiable Under OSHA 2012 HCS: See product label for any additional hazards.

NFPA 704 (National Fire Protection Association)

Health: 0

Flammability: 0

Instability: 0

Special Hazards: None



SECTION 3. Composition/Information on Ingredients

Components

Substance Name	CAS No.	Concentration % w/w
Spinosad:		6.25
Spinosyn A	131929-60-7	
Spinosyn D	131929-63-0	

Ingredients not identified are non-hazardous and/or are not required to be disclosed pursuant to 29 CFR 1910.1200 (2012), and are withheld as trade secret.



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SECTION 4. First Aid Measures

Description of First Aid Measures

General Advice:	If symptoms develop or persist, or for treatment advice, call a poison control center or doctor.
If in Eyes:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present and if easy to do, after the first 5 minutes then continue rinsing.
If on Skin:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.
If Swallowed:	Call a poison control center or doctor if you feel unwell. Have the person sip water if able to do so. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to an unconscious person.
If Inhaled:	Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration; if by mouth-to-mouth use rescuer protection (pocket mask, etc.).

Most Important Symptoms and Effects, Both Acute and Delayed.

Eye Contact:	This product may release nuisance dust in handling or use. Dust may cause slight transient (temporary) eye irritation.
	Recommendations for Immediate Medical Care and Special Treatment
Treatment:	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. For medical treatment information, contact the poison control hotline at 1-800-214-7753. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

SECTION 5. Fire-Fighting Measures

Extinguishing Media

Suitable Extinguishing Media:	Water Fog, Carbon Dioxide (CO ₂), Dry Chemical, Foam
Unsuitable Extinguishing Media:	None known

Special Hazards Arising from the Substance or Mixture

Specific Hazards:	Under fire conditions some components may decompose. Combustion products may include CO and NO _x .
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Special Protective Equipment and Precautions for Fire-Fighters

Protection Against Fire:	Wear positive pressure, self-contained breathing apparatus and protective firefighting clothing (includes fire-fighting helmet, coat, pants, boots, and gloves).
Special Procedures:	Fight fires from a protected location. Dike fire control water for later disposal. Keep container cool by spraying with water.

SECTION 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

General Precautions:	Use appropriate protection (see section 8)
Environmental Precautions:	Prevent product from entering into drains and waterways. Collect and dispose of this material and its container in accordance with national and regional regulations. If the product has contaminated surface water, inform the appropriate authorities. See Section 12 for additional ecological information.



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Methods and Material for Containment and Cleaning Up

Clean Up Methods: Collect all material with shovel, other instrument, or by hand while using appropriate personal protection equipment, and place in closable marked containers.

SECTION 7. Handling and Storage

Precautions for Safe Handling

Handling: Keep out of reach of children. Do not take internally. Avoid contact with skin and eyes.
Hygiene Measures: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Conditions for Safe Storage, Including Any Incompatibilities

Storage: Product should be stored in compliance with local regulations. Store in a cool, dry, well-ventilated place in the original container. Protect from excessive heat and cold. Do not store above 129°F (54°C). Avoid storage at temperatures exceeding 100°F (38°C) for extended periods. Do not store near food, drink, animal feeding stuffs, pharmaceuticals, cosmetics or fertilizers. Keep out of reach of children.

SECTION 8. Exposure Controls / Personal Protection

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

Control Parameters

Component Name	CAS No.	List	Type	Value
Spinosyn A & Spinosyn D	131929-60-7 131929-63-0	DOW IHG	TWA	0.3 mg/m ³

Exposure Controls

Engineering Controls: Use with adequate ventilation. Wash hands thoroughly after handling. Wash clothing before re-using.

Individual Protection Measures, such as Personal Protection Equipment

Eye Protection: While not required, it is good practice to minimize eye contact by wearing eye protection such as safety glasses, goggles or face shield during use.
Skin Protection: Wear suitable protective clothing.
Hand Protection: It is good industrial hygiene practice to minimize skin contact. If required or preferred, use suitable protective chemical resistant gloves such as latex, nitrile, or neoprene.
Respiratory Protection: None required.

SECTION 9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance: Solid tablet
Color: Tan/white
Odor: Earthy scent
Odor Threshold: Not Available
pH: Not Determined
Melting Point: Not Determined
Freezing Point: Not Applicable
Initial Boiling Point: Not Applicable



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Flash Point:	Not Determined
Evaporation Rate:	Not Applicable
Flammability:	Not Determined
Explosion limits [U/L]:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Relative Density:	1.766 g/mL
Solubility:	Not Determined
Partition Coefficient:	Not Determined
Auto-Ignition Temperature:	Not Determined
Viscosity:	Not Applicable
Decomposition Temperature:	Not Available
Explosive Properties:	Not Available
Oxidizing Properties:	Not Available

SECTION 10. Stability and Reactivity

Reactivity:	Not Available.
Chemical Stability:	Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Reactions:	None under normal conditions.
Hazardous Polymerization:	Not known to occur.
Conditions to Avoid:	Protect from direct sunlight and excessive heat.
Incompatible Materials:	Avoid contact with strong oxidizing agents, strong acids, strong bases.
Hazardous Decomposition Products:	None known under normal conditions of storage and use.

SECTION 11. Toxicological Information

Information on Likely Routes of Exposure

Eye Contact:	This product may release nuisance dust in handling or use. Dust may cause slight transient (temporary) eye irritation.
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Information on Toxicological Effects

Acute Toxicity/Effects*

*Some acute toxicity values are not available for Natular® XRT. Presented values are based on toxicity values of a product of similar composition and form.

Oral, Rat LD ₅₀	> 5,050 mg/kg-bw
Dermal, Rat LD ₅₀	> 2,000 mg/kg-bw
Inhalation, Rat LC ₅₀	> 5.0 g/m ³
Skin Corrosion/Irritation:	Not a skin irritant
Serious Eye Damage/Irritation:	Not an eye irritant
Skin Sensitization:	Not a skin sensitizer
STOT – Single Exposure:	No data is available to indicate product or any components present at greater than 0.1% present a specific target organ toxicity hazard from single exposure.



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Chronic Toxicity/Effects

Germ Cell Mutagenicity:	This product has not been tested. No data is available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. Spinosad is not mutagenic.
Carcinogenicity:	This product does not contain any carcinogens as listed by OSHA, IARC, or NTP. Spinosad is not carcinogenic.
Reproductive Effects:	No data is available to indicate product or any components present at greater than 0.1% cause reproductive or teratogenic toxicity. For spinosad: in laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.
STOT – Repeated Exposure:	In animals, spinosad has been shown to cause vacuolation of cells in various tissues. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

SECTION 12. Ecological Information

Ecotoxicity

Product specific data is not available. Data referenced is in relation to the active ingredient, spinosad. Spinosad is moderately toxic to aquatic organisms on an acute basis (LC₅₀/EC₅₀ between 1 and 10 mg/L in the most sensitive species tested).

Toxicity to Fish:	96-hr Acute LC ₅₀ 5.0 mg/L, Common Carp (<i>Cyprinus carpio</i>) 96-hr Acute LC ₅₀ 5.9 mg/L, Bluegill Sunfish (<i>Lepomis macrochirus</i>) 96-hr Acute LC ₅₀ 30 mg/L, Rainbow Trout (<i>Oncorhynchus mykiss</i>)
Toxicity to Aquatic Invertebrates:	48-hr Acute EC ₅₀ 1.5-14.0 mg/L, Water Flea (<i>Daphnia magna</i>) 48-hr LC ₅₀ > 7.9 mg/L, Mysid Shrimp (<i>Americamysis bahia</i>)
Toxicity to Aquatic Plants:	5-d EC ₅₀ 8.1 mg/L, Blue Green Algae (<i>Anabaena flos-aquae</i>)

Persistence and Degradability

Product specific data not available. Data referenced is in relation to the active ingredient, spinosad.

Log K _{ow} :	Spinosyn A: 3.91; Spinosyn D: 4.38 (distilled water)
Bioaccumulation:	Bioconcentration potential is low (BCF < 100)
Bioconcentration Factor:	Spinosyn A: 19; Spinosyn D: 33 mL/g (fish)
Mobility in Soil:	Potential for mobility in soil is low (K _{oc} between 500 and 2000)
Partition Coefficient, K _{oc} :	701

SECTION 13. Disposal Considerations

Waste Treatment and Disposal Methods

Consult product label for disposal instructions. Avoid release to the environment. Improper disposal of excess product or rinsate is a violation of the 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.

SECTION 14. Transport Information

DOT (US)

Not regulated (Bulk and Non-Bulk Quantities)

IMDG (Vessel)

UN Number: 3077

Hazard Class: 9



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Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (Spinosad)

Marine Pollutant: Yes

ICAO/IATA (Air Transport)

UN Number: 3077

Hazard Class: 9

Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (Spinosad)

Environmental Hazard: Yes

Marine Pollutant: Yes

SECTION 15. Regulatory Information

OSHA HAZARD COMMUNICATION STANDARD: This product is not considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

FIFRA Information:

This chemical is a pesticide product regulated 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 for the Safety Data Sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

KEEP OUT OF REACH OF CHILDREN

Signal Word: None

Precautionary Statements, Personal Protective Equipment (PPE), User Safety Requirements, User Safety Recommendations, and Engineering Controls: Refer to the product label.

Other Federal Regulations

SARA TITLE III CLASSIFICATION

Section 302: None

Section 311/312: Immediate (acute) hazard.

Section 313: None

CERCLA RQ: None

US State Regulations

U.S. California Proposition 65: This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

STATE RIGHT-TO-KNOW: National, state, provincial or local emergency planning, community right-to-know or other laws, regulations or ordinances may be applicable-consult applicable national, state, provincial or local laws.

SECTION 16. Other Information

DISCLAIMER OF LIABILITY: The information in this SDS was obtained from sources we believe to be reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared as is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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