

SAFETY DATA SHEET

SDS ID: 92311-2-95213

1. PRODUCT AND COMPANY IDENTIFICATION		
Product name:	biotrinsic by Indigo X12 WD Biofungicide	
Product use / type:	Fungicide	
Uses advised against / restrictions:	Refer to product label.	
EPA Registration No.:	92311-2-95213	
Chemical name / synonym / active ingredient(s):	Natamycin; 6,11,28-trioxatricyclo[22.3.1.0 ^{5,7}]octacosa-8,14,16,18,20- pentaene-35-carboxylic acid, 22-[(3-amino-3,6-dideoxy-β-D- mannopyranosyl)oxy]-1,3,26-trihydroxy-12-methyl-10-oxo-, (1R,3S,5R,7R,8E,12R,14E,16E,18E,20E,22R,24S,25R,26S)-	
Manufacturer / Registrant:	Ceradis B.V. / Indigo Ag, Inc. 710 Antrim Meadow Ln Cary, NC 27519	
Manufacturer's Telephone:	919-234-6242	
Email:	info@ceradis.com	
Emergency phone number:	1-800-222-1222	

2. HAZARDS IDENTIFICATION

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Classification Not classified

EMERGENCY OVERVIEW

Appearance: Off-white

Physical state: Liquid

Odor: Characteristic

Other Information / Potential Hazards:

None known based on supplied information.

3. COMPOSITION / INFORMATION ON INGREDIENTS		
Chemical Name	CAS No.	Weight %
Natamycin	7681-93-8	13.459
Other ingredients	-	**

** Exact concentration of components withheld as a trade secret. Values are not product specifications.

4. FIRST AID MEASURES	
If swallowed:	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.
If in Eyes:	Hold eye open and rinse gently with water for 15-30 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing:	Remove contaminated clothing and shoes. Rinse skin immediately with plenty of water for 15-30 minutes. Call a poison control center or doctor for treatment advice.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or get medical help, then give artificial respiration, preferably mouth-to-mouth with the aid of a pocket mask equipped with a one-way valve. Call a poison control center or doctor for treatment advice.
Most important symptoms, both acute and delayed:	Causes temporary eye irritation.
Immediate and any special treatment:	Removal of exposure followed by symptomatic and supportive care. No other information available.

5. FIRE-FIGHTING MEASURES	
Flammable properties:	Not flammable.
Extinguishing media:	Water fog, dry chemical, foam and carbon dioxide (CO ₂)
Unsuitable extinguishing media:	High pressure water streams.
Specific material hazards	Under fire conditions, may emit irritating vapors, carbon dioxide and carbon monoxide.
Firefighting measures:	Use extinguishing media appropriate for surrounding fire. Prevent contaminated firefighting waters and spillage from entering sewers, drains and waterways.

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Protective equipment and precautions for firefighters:	Wear full protective firefighting gear including self- contained breathing apparatus pressure demand (MSHA/NIOSH approved or equivalent).
6. ACCIDENTAL RELEASE MEASURES	
Personal precautions:	Wear protective gloves / clothing and eye protection. Avoid contact with eyes, skin and clothing. Ensure adequate ventilation.
Environmental precautions:	Prevent entry into waterways, lakes, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system.
Methods for containment:	Dike to contain spill with inert material (e.g. sand, silica gel, or binder).
Methods for cleanup:	Soak up with inert absorbent. Pick up and transfer to properly labeled containers for disposal.
7. HANDLING AND STORAGE	
Precautions for safe handling:	Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product.
Condition for safe storage:	Store and handle in accordance with good industrial hygiene practices. Keep container tightly closed. Store in a cool and well-ventilated place. Store in original labeled container. Store away from direct sunlight between 40°F and 90°F.
Incompatible storage situations:	Separate pesticides during storage to prevent cross- contamination of other pesticides, fertilizers, food, and feed.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Guidelines:

The following recommendations for exposure controls are intended for the manufacture, formulation and packaging of this material. Commercial applicators and/or on-farm applications should refer to the product label for personal protection equipment.

Workplace Control Parameters:	Exposure Guidelines
	No specific occupational exposure limits established.
Engineering controls:	Emergency eye wash. Ensure adequate ventilation or provide local exhaust.
Personal protective equipment:	Follow personal protective equipment manufacturers recommendations for use, cleaning and maintenance.

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Eye / face protection:	Safety glasses with side-shields.	
Body / skin protection:	Long sleeved shirt, long pants, shoes plus socks. Wash work clothing before reuse.	
Hand protection:	Waterproof gloves / hand protection.	
Respiratory protection:	If handling without sufficient ventilation or excess airborne exposure, wear a dust / mist filtering respirator.	

9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical state:	Liquid
Appearance:	Off-white
Odor:	Characteristic
pH:	8.05
Melting / freezing point:	No information available
Boiling point	No information available
Flash point:	> 200.6° F / 93.7° C
Explosive properties:	No information available
Autoignition temperature:	No information available
Vapor pressure:	No information available
Oxidizing properties:	No information available
Relative density:	1.1145 g/cm ³
Solubility:	Miscible
Viscosity:	130 cSt at 25° C

10. STABILITY AND REACTIVITY	
Reactivity / chemical stability:	Stable under normal temperature and conditions.
Possibility of hazardous reactions:	Not expected under normal conditions of handling and use.
Conditions to avoid:	No information available.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	No information available.

Information on likely routes of exposure:	
Inhalation	May be harmful if inhaled.
Eye contact	Causes minimal but temporary eye irritation.
Skin contact	Slightly irritating.
Ingestion	May be harmful if swallowed.

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Product numerical measures of toxicology:

Acute oral LD ₅₀ :	Rat >5000 mg/kg
Acute dermal LD ₅₀ :	No information available.
Acute inhalation LC ₅₀ :	Rat >2.23 mg/L
Eye irritation:	Slight irritation.
Skin irritation:	Slight irritation.
Sensitization:	Not a sensitizer (mice).
Delayed and immediate effects as well as	chronic effects from short and long-term exposure
Component information:	
Natamycin (7681-93-8)	
Acute oral LD₅₀:	Rat >5000 mg/kg
Sensitization (experience with human exposure):	No information available.
Mutagenic effects:	No information available.
Carcinogenicity:	Not listed on NTP, IARC or OSHA lists.
Reproductive / Developmental effects:	No information available.
12. ECOLOGICAL INFORMATION	
Environmental Hazards:	Keep out of any body of water.
Ecotoxicity: Natamycin (7681-93-8)	LDC ₅₀ : >2000 mg/kg bw <i>Avain spp.</i>
Persistence and degradability:	No information available.
Bioaccumulation:	No information available.
Mobility:	No information available.

13. DISPOSAL CONSIDERATIONS	
Product disposal:	Wastes resulting from the use of this product must be disposed in accordance with applicable Federal, State or local regulations. Keep out of drains, sewers, ditches and water ways.

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Container disposal: Refer to product label for container disposal. Do not reuse containers.

14. TRANSPORT INFORMATION

U.S. DOT:

Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations:

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, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

TSCA:	SCA exempt; regulated under FIFRA	
SARA 311/312:	Refer to section 2 for GHS hazards.	
SARA 313:	No substances listed.	
CERCLA:	No substances listed.	

U.S. State Regulations:

State Right-to-Know Regulations: Pennsylvania Right-to-know; Water (7732-18-5).

16. OTHER INFORMATION					
NFPA Ratings:	Health	Fire	Instability		
	0	0	0		
Version Number: Revision Date: Revision Note:		1.0 June 22, 2020 Initial release			
Key / Legend					
ACGIH - American Confe CAS - Chemical Abstract C – Centigrade cSt - Centistokes CERCLA - Comprehensiv DOT - Department of Tra	s Service ve Environmental Res	tal Industrial Hygienists sponse, Compensation, and Lial	bility Act		

FIFRA – Federal Insecticide Fungicide and Rodenticide Act

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GHS – Global Harmonized System IARC - International Agency for Research on Cancer IATA - International Air Transport Association IMDG - International Maritime Dangerous Goods LC / LD – Lethal Concentration / Lethal Dose NFPA - National Fire Protection Association NTP - National Toxicology Program OSHA – Occupational Safety and Health Administration RCRA - Resource Conservation and Recovery Act SARA - Superfund Amendments and Reauthorization Act TSCA - Toxic Substances Control Act

Other information / Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet