



Please read the entire document. This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information contained herein must be incorporated in your MSDS.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ENDORSE®
EPA REGISTRATION NUMBER(S): 68173-2, 66330-41
SYNONYM(S): Polyoxin D Zinc Salt, TM-43801, STOP-IT

<u>COMPANY</u>
Arysta LifeScience North America LLC 15401 Weston Parkway, Suite 150 Cary, NC 27513

<u>EMERGENCY TELEPHONE NUMBERS</u>	
HEALTH EMERGENCY:	SPILL EMERGENCY:
1-866-303-6952, or 1-651-632-8946	1-800-424-9300, or 1-703-527-3887

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Active Ingredient(s)/ Hazardous Inert Ingredient(s)	CAS #	Exposure Limits*	% Weight	% Volume
Zinc 5-[[2-amino-5-O-(aminocarbonyl)-2-deoxy-L-xylonoyl]amino]-1-(5-carboxy-3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-1,5-dideoxy-β-D-allofuranuronate	146659-78-1	TWA^a OSHA PEL ^b : None ACGIH TLV ^c : None NIOSH REL ^d : None	2.5	NA

Only the identities of the active ingredient(s) and any hazardous inert ingredients are listed. Specific information on all of this product's ingredients can be obtained by the treating medical professional or spill emergency responder for the management of exposures, spills, or safety assessments.

*Source: *Guide to Occupational Exposure Values 2000*, published by ACGIH

^a**TWA**: Time-weighted average exposure concentration for a conventional 8-hour (TLV, PEL) or up to a 10-hour (REL) workday and a 40-hour workweek.

^b**OSHA PEL**: Occupational Safety and Health Administration Permissible Exposure Limits.

^c**ACGIH TLV**: American Conference of Governmental Industrial Hygienists, Inc., Threshold Limit Values.

^d**NIOSH REL**: National Institute for Occupational Safety and Health Recommended Exposure Limits.

SECTION 3: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

CAUTION:

- **MAY CAUSE SLIGHT EYE AND SKIN IRRITATION**
- **PROLONGED EXPOSURE MAY CAUSE SKIN SENSITIZATION**
- **KEEP OUT OF REACH OF CHILDREN**

Acute Health Hazards

Eye: May cause slight eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

Skin: May cause slight skin irritation. Avoid contact with skin and clothing. Wash thoroughly with soap and water after handling.

Ingestion: Not expected to be an ingestion hazard under normal handling procedures.

Inhalation: Not expected to be an inhalation hazard under normal handling procedures.

Chronic Health Hazards (Including Cancer): No evidence of carcinogenicity or other treatment-related effects following chronic exposure in laboratory animals.

Reproductive and developmental Toxicity: No evidence of reproductive or developmental toxicity.

SECTION 4: FIRST AID MEASURES

Eyes: 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 poison control center or doctor for treatment advice.

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

Ingestion: 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.

Inhalation: Move person to fresh air. If person is not breathing, call 9-1-1 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Limits in Air (% by volume):		
	Upper:	NDA
	Lower:	NDA
Flash Point:		NDA
	Method Used:	NDA
Autoignition Temperature:		NDA
LEL/UEL:		NDA
NFPA Hazard Classification:		
	Health:	1
	Flammability:	0
	Reactivity:	0
	Other:	None
Extinguishing Media:		Water spray or dry chemical
Special Fire Fighting Procedures:		NDA
Hazardous Combustion Products:		NDA

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PHONE NUMBERS

Exposure Calls (PROSAR): 1-866-303-6952 or 1-651-632-8946 (International)

Spill Calls (CHEMTREC): 1-800-424-9300 or 1-703-527-3887

Sweep up spilled material and place in covered, dry container. Wash spill response materials thoroughly before reuse.

SECTION 7: HANDLING AND STORAGE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read entire label. Use strictly in accordance with label precautionary statements and directions. Read and observe all precautions on product label. Handle and open container with care. Avoid inhaling this material. Avoid eye and skin contact with this material. Wash contaminated clothes thoroughly before reuse. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep container closed or equipped with a local air exhauster. Handle the container carefully. Do not drop or drag the container. Avoid impacts to the container. Store container in dry conditions without direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear suitable eye protection.

Respiratory/Ventilation Requirements: Dust-proof mask.

Skin Protection: Wear appropriate protective clothing and gloves to prevent skin contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Physical State:	Gray brownish fine powder
Odor:	Characteristic odor
pH:	5.5-7.5
Boiling Point:	NA
Melting Point:	> 240°C
Freezing Point:	NA
Vapor Pressure:	NA
Vapor Density:	NA
Specific Gravity:	0.25-0.37 g/cc
Evaporation Rate:	NA
Solubility:	
Water, acetone, DMSO:	Up to 0.1 g/L
0.1N hydrochloric acid:	43.5 g/L
0.1N sodium hydroxide:	4.0 g/L
Percent Solids by Weight:	NA
Percent Volatile:	NA
Volatile Organic Compounds:	
with water:	NDA
without water:	NDA
Molecular Weight:	NDA
Viscosity:	NA

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable for at least one year
Hazardous Polymerization:	NDA
Flash Point:	NDA
Flammable Point:	NDA
Auto Ignition:	NDA
Incompatibility With Other Materials:	NDA
Hazardous Decomposition Products:	NDA

SECTION 11: TOXICOLOGICAL INFORMATION

Acute:

Eye Irritation: Slight eye irritant (cleared within 4 days following exposure)

Skin Irritation: Slight irritant (P.I.I. = 0.8)

Skin Sensitization: A mild skin sensitizer in guinea pigs

Dermal Toxicity: LD₅₀ (rat) = >2,000 mg/kg

Oral Toxicity: LD₅₀ (rat) = > 15,000 mg/kg (M) and 10,000 to 15,000 mg/kg (F)

Inhalation Toxicity: 4-hour LC₅₀ (aerosol) = > 2.78 mg/L

Subchronic Toxicity: No treatment-related effects were observed following chronic exposure in laboratory animals to polyoxin D technical.

Chronic Health Hazards (including Cancer): No evidence of carcinogenicity or other treatment-related effects following chronic exposure in laboratory animals.

Reproductive and Developmental Toxicity: No evidence of reproductive or developmental toxicity.

Genotoxicity: No evidence of genotoxicity.

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate and Distribution: Product decomposes

Aquatic Organism Toxicity (based upon technical material):

Rainbow trout (*Oncorhynchus mykiss*) 96-hr LC₅₀ = 5.1 ppm

Daphnid (*Daphnia magna*) EC₅₀ = 1.4 ppm

Avian Toxicity (based upon technical material):

Mallard duck oral LD₅₀ > 2150 ppm

Mallard duck dietary LC₅₀ > 5000 ppm

SECTION 13: DISPOSAL CONSIDERATIONS

End users must dispose of any unused product as per the label recommendations and in accordance with all applicable laws and regulations. Check governmental regulations and local authorities for approved disposal of this material.

SECTION 14: TRANSPORT INFORMATION

D.O.T. Shipping Name:	Pesticide, non-regulated
Technical Shipping Name:	NA
Packing Group:	NA
D.O.T. Hazard Class:	NA
U.N/N.A. Number:	NA
Product RQ (lbs):	NA
D.O.T. Label:	NA
D.O.T. Placard:	NA
Marine Pollutant:	NA
IMO :	
IMO Label:	NA
IMO Placard:	NA
European Road/Rail:	
Class:	NA

SECTION 15: REGULATORY INFORMATION

U.S Federal Regulations

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act): All pesticides are governed under FIFRA. Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

CERCLA (Comprehensive Response Compensation, and Liability Act): NA

EPCRA (Emergency Planning and Community Right-to-Know Act) Section 313: None

OSHA (Occupational Safety and Health Administration): NA

RCRA (Resource Conservation and Recovery Act): None

SARA Title III (SUPERFUND Amendments and Reauthorization Act):

Section 302 (EHS) TPQ: NONE

Section 304 (EHS) RQ: NONE

Section 311/312 CATEGORIES

1. Immediate (Acute) Health Effects; **YES**
2. Delayed (Chronic) Health Effect; **NO**
3. Fire Hazard; **NO**
4. Sudden Release of Pressure Hazard; **NO**
5. Reactivity Hazard; **NDA**

TSCA (Toxic Substance Control Act): This product is exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

State Regulations: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

SECTION 16: OTHER INFORMATION

Reason for issue:	Changes to EPA Registration Number (Section 1)
Prepared by:	Ashley R. Brown
Issue date:	09/10/08
Supersedes date:	05/22/08
MSDS number:	00155

The information in this MSDS is based on data available to us as of the issue date given herein, and believed to be correct. Contact Arysta LifeScience North America LLC at (919) 678-4900 to determine if additional data and information have become available since the issue date.

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