

MATERIAL SAFETY DATA SHEET

Prepared Date: MAY-10, 2012
 Revised Date: OCT-5, 2012
 Contact:
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SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: OSO 5%SC Fungicide
 (Polyoxin D Zinc Salt, 5% Suspension Concentration product)
JAPAN MAFF REGISTRATION NUMBER: N/A
EPA REGISTRATION NUMBER: 68173-4-70051
SYNONYM(S): N/A
COMPANY: Certis U.S.A. L.L.C.
 9145 Guilford Road, Suite 175, Columbia, MD 21046 USA
EMERGENCY TELEPHONE NUMBER: 1-800-255-3924

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW CAUSES MILD DERMAL SENSITIZATION.
 AVOID CONTACT WITH SKIN/EYES/CLOTHING.
 KEEP OUT OF REACH OF CHILDREN.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Active Ingredient:	5%
Common chemical name: Polyoxin D zinc salt IUPAC name: 5-(2-amino-5- <i>O</i> -carbamoyl-2-deoxy-L-xylonamido)-1-(5-carboxy-1,2,3,4-tetrahydro-2,4-dioxypyrimidin-1-yl)-1,5-dideoxy-β-D-allofuranuronic acid zinc salt CAS Name: b-D-Allofuranuronic acid,5-[[2-amino-5- <i>O</i> -(aminocarbonyl)-2-deoxy-L-xylonoyl]amino]-1-(5-carboxy-3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl)-1,5-dideoxy-,zinc salt (1:1) (9CI) CAS Registration Number: 146659-78-1 Molecular formula: C ₁₇ H ₂₃ N ₅ O ₁₄ Zn (M.W. 586.76)	
Inert ingredients:	Other ingredients 95%

SECTION 4: FIRST AID MEASURES

If on skin or clothing:	<ul style="list-style-type: none"> ● 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.
If in eye:	<ul style="list-style-type: none"> ● Hold eye open and rinse slowly and gently with water for 15-20 minutes. ● Remove contact lenses, if present, after the first minutes, the continue rinsing eye. ● Call a poison control center or doctor for treatment advice.

SECTION 4: FIRST AID MEASURES (Continued)

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| If swallowed: | <ul style="list-style-type: none"> ● Call 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 so by the poison control center or doctor. |
| If inhaled: | <ul style="list-style-type: none"> ● Do not give anything by mouth to an unconscious person. ● Move person to fresh air. ● If person is not breathing, call 911 or an ambulance, then give artificial respiration. ● Call a poison control center or doctor for further advice. |

SECTION 5: FIRE FIGHTING MEASURES

Flammable Limits in Air (5 by volume):

Upper:	No data available
Lower:	No data available
Flash Point:	No data available
Method Used:	No data available
Auto ignition Temperature:	No data available
LEL/UEL	No data available
Extinguishing Media:	Water spray or dry chemicals
Special Fire Fighting Procedures:	No data available
Hazardous Combustion Products:	No data available

SECTION 6: ACCIDENTIAL RELEASE MEASURES

Measures for human:	Inside a building, ventilate well until clean-up is completed. During clean-up, workers should wear protective clothes to prevent skin contact.
Measures for environment:	Avoid release of product into rivers or lakes.
Method for removal:	Collect the spilled product in containers and close tightly. Wash the affected area with plenty of water.

SECTION 7: HANDLING AND STORAGE

Handling:	Handle and open container with care.
Protective Gloves:	Rubber gloves recommended.
Eye Protection:	Safety glasses recommended.
Personal Hygiene:	Wash thoroughly after handling.
Pesticide storage:	Store in dry place away from food or feed. Keep away from children.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:	Eye protection recommended.
Respiration/Ventilation Requirements:	None.
Skin Protection:	Wear appropriate protective clothing and gloves to prevent skin contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Dark Brown Liquid
Physical state:	Viscous liquid suspension
Odor:	Similar to Vegetable oil
pH:	7.01 at 25°C (1% aqueous mixture)
Boiling Point:	No data available
Vapor Pressure:	No data available
Specific Gravity	1.05 (22°C)
Oxidation/Reduction:	No data available
Explosibility:	No explosive properties

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable under normal use and storage conditions
Hazardous Polymerization:	Will not occur.
Flashpoint:	No data available
Flammable Point:	No data available
Auto ignition:	No data available
Incompatibility with Other Materials:	No data available
Hazardous Decomposition Products:	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀:	>5,000 mg/kg (rat) (EPA Toxicity Category IV; practically non-toxic)
Acute Dermal LD₅₀:	>5,050 mg/ kg (rat) (EPA Toxicity Category IV; practically non-toxic)
Inhalation LC₅₀:	>2.20 mg/L (rat) (EPA Toxicity Category IV; practically non-toxic)
Eye Irritation:	Non-irritating (EPA Toxicity Category IV)
Dermal Irritation:	No irritation observed 48 hours after contact. (EPA Toxicity Category IV)
Dermal Sensitization:	A mild sensitizer in guinea pig.

SECTION 12: ECOLOGICAL INFORMATION

Data for the active ingredient:

Fish:	Acute LC ₅₀ (96-hr) >100 mg/L (practically non-toxic)
<i>Daphnia magna</i> (water flea):	Acute EC ₅₀ (48-hr) =4.08 mg/L (moderately toxic)
Algae:	Growth Inhibition EbC ₅₀ (0-72-hr) = 6.47 mg/L (moderately toxic) ErC ₅₀ (0-72-hr)=7.01 mg/L
Honeybee:	Acute oral LD ₅₀ (96-hr) = 28.774 µg/bee (practically nontoxic)
Groundwater:	No contamination is anticipated. Active ingredient readily hydrolyzes.
Bioaccumulation:	No data available on bioaccumulation

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods:	Dispose of waste and residues in accordance with local authority requirements. Check governmental regulation and local authorities for approved disposal of this material. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
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SECTION 14: TRANSPORT INFORMATION

UN-Number: Not regulated

SECTION15: REGULATORY INFORMATION

Agricultural Chemicals Regulation Law (Japan), Japanese Chemicals Substances Control Act
United States: Federal Insecticide Fungicide Rodenticide Act (FIFRA), Federal Food Drug and Cosmetic Act (FFDCA). Food tolerance exemptions: 40 CFR § 180.1285.

SECTION16: OTHER INFORMATION

None