



SAFETY DATA SHEET

SECTION 1	PRODUCT AND COMPANY IDENTIFICATION	
Trade Name:	Manage® Microbial Inoculant	
Primary Use:	Microbial Inoculant to Encourage Nutrient Cycling, Root Architecture and Soil Structure	
Company Information:	Corporate Headquarters	The Mosaic Company 101 East Kennedy Blvd, Ste 2500 Tampa, FL 33602
	US Guarantor	Mosaic Biosciences Headquarters 5 Lab Drive, Suite 3200 Durham, NC 27709 Production 111 E. Tever Street Plant City, FL 33563-2417
	Canada Guarantor	Mosaic Canada Crop Nutrition, LP 1700 – 2010 12th Ave. Regina, SK Canada S4P 0M3
	Contact Info	www.cropnutrition.com +1 (813) 718-7284 MBNAinfo@mosaicco.com
Emergency Telephone:	EMERGENCY OVERVIEW 24 Hour Emergency Telephone Number: For Chemical Emergencies: Spill, Leak, Fire or Accident Call CHEMTREC North America: (800) 424-9300 (reference CCN201871) Others: (703) 527-3887 (collect)	

SECTION 2	HAZARD IDENTIFICATION
OSHA/HCS Status:	This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). See appropriate classifications below.
n/a	Signal Word: None Hazard Statement(s) None

SECTION 3	COMPOSITION INFORMATION ON INGREDIENTS		
Composition:	Component	CAS#	Percentage
	Bacillus licheniformis	n/a	<1%
	Bacillus amyloliquefasciens	n/a	<1%
	Bacillus methylotrophicus	n/a	<1%
	Bacillus subtilis	n/a	<1%
	Humic Acid	68514-28-3	2%
	Kelp	68844-77-9	2%
Water Based Culture Medium	7732-18-5	95%	

Status: New
 Section(s) Revised: n/a
 Revision Date: Oct 3, 2023

SECTION 4	FIRST AID MEASURES	
First Aid Procedures:	Eyes:	Move victim away from exposure and into fresh air. Flush eyes with plenty of clean water for at least 15 minutes. If symptoms persist, seek medical attention.
	Skin:	Wash contaminated area thoroughly with mild soap and water. If chemical or solution soaks through clothing, remove clothing and wash contaminated skin. If irritation develops and persists after washing, seek medical attention.
	Inhaled:	If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention.
	Ingestion:	Rinse mouth thoroughly. If large amounts are swallowed, seek emergency medical attention.

SECTION 5	FIRE FIGHTING MEASURES	
Extinguishing Media:	Product is not flammable. Use extinguishing agent suitable for type of surrounding fire.	
Protection of Firefighters:	Positive pressure, self-contained breathing apparatus is required for all firefighting activities involving hazardous materials.	

SECTION 6	ACCIDENTAL RELEASE MEASURES	
Response Techniques:	Contain spill, absorb liquid with clay or other absorbent material. Sweep up and package appropriately for disposal.	

SECTION 7	HANDLING AND STORAGE	
Handling:	Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Wash contaminated clothing or shoes. Use good personal hygiene practices.	
Storage:	Use and store this material in dry, well-ventilated areas. Store only in approved containers. Keep container(s) tightly closed. Avoid excessive heat and direct sunlight.	

SECTION 8	EXPOSURE CONTROLS / PERSONAL PROTECTION	
Engineering Controls:	Use process enclosure, general dilution ventilation or local exhaust systems where necessary to maintain airborne dust concentration below the OSHA standards or in accordance with applicable regulations.	
Personal Protective Equipment (PPE):	Eye/Face:	Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended.
	Skin:	Wear pants, shirt, shoes and socks. Gloves may be worn by individuals with sensitive skin.
	Respiratory:	Under normal conditions, none required. If drift occurs, wear breathing apparatus
	Other:	A source of clean water should be available in the work area for flushing eyes and skin.

General Hygiene Considerations:	Wash thoroughly after handling Use adequate ventilation	
Exposure Guidelines:	OSHA Permissible Exposure Limits (PEL):	No OSHA TLV

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES		
Appearance:	Dark or grey colored powder	Vapor Pressure (mm Hg):	Not applicable
Odor:	Characteristic fermentation odor	Vapor Density (air=1):	Not applicable
Odor Threshold:	No data available	Specific Gravity or Relative Density:	Not applicable
Physical state:	Powder	Bulk Density:	1.1 ± 0.02 g/mL
pH:	6 – 7	Solubility in Water:	Partial forms of suspension
Melting Point/ Freezing Point:	Not applicable	Partition coefficient:	No data available
Boiling Point:	212°F	Auto-Ignition Temperature:	Not applicable
Flash Point:	Not applicable	Decomposition Temperature:	Not applicable
Evaporation Rate:	No data available	Viscosity:	No data available
Flammability:	Not applicable	Volatility:	Not applicable
Upper/Lower Flammability or explosive limits	Not applicable		

SECTION 10	STABILITY AND REACTIVITY
Reactivity:	No specific test data related to reactivity available for this product.
Chemical Stability:	Stable under normal conditions. Must be kept dry.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to Avoid:	Extreme temperatures.
Incompatible Materials:	Strong acid & alkali, organic solvents and oxidizing agents
Hazardous Decomposition Products:	None

SECTION 11	TOXICOLOGICAL INFORMATION
No components of this product are listed as toxic or carcinogenic by NTP, IARC, or OSHA	

SECTION 12	ECOLOGICAL INFORMATION
Ecotoxicology:	This product is bio-degradable. Dispose of this product by diluting it with water and apply to soil, plants, turf, etc.

SECTION 13	DISPOSAL CONSIDERATIONS
-------------------	--------------------------------



	Recover or recycle if possible. Properly characterize all waste materials. Consult federal, state/provincial and local regulations for bacteria regarding the proper disposal of this material.
--	---

SECTION 14	TRANSPORT INFO
Non-hazardous	

SECTION 15	REGULATORY INFORMATION
Not Applicable	

SECTION 16	OTHER INFORMATION
Disclaimer:	<p>The information in this document is believed to be correct as of the date issued. HOWEVER, MOSAIC MAKES NO GUARANTEE, REPRESENTATION, OR WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO THE USE OF THIS PRODUCT.</p> <p>User is responsible for determining whether this product is fit for a particular purpose and suitable for user's method of use or application and assumes the risk of use thereof. The conditions and use of this product are beyond the control of Mosaic, and Mosaic disclaims any liability for loss or damage incurred in connection with the use or misuse of this product. Each user should review the recommended industrial hygiene and safe handling procedures in the specific context of the intended use and determine whether they are appropriate.</p>
Preparation:	The preparation of this SDS was in accordance with ANSI Z400.1-2010.
Revision Date:	June 7, 2023