



Safety Data Sheet

FROZEN

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Exceed® Frozen Rhizobium Concentrate

SECTION 1: IDENTIFICATION

Product Name: Exceed® Frozen
Other Identification: 3008, 5001, Rhizobium Frozen Concentrate

Recommended Use: Contains naturally occurring, non-pathogenic bacteria. These are symbiotic nitrogen-fixing bacteria to be applied as a seed treatment prior to planting. This material is not a plant food product. See product label for specific crop information, application rates and methods.

Restrictions on Use: See product label for any restrictions on the use of this product. Not for food, feed or drug use.

Chemical Name: Rhizobium
Distributed by: Visjon Biologics
4385 Seymour Highway
Wichita Falls, TX 76309

For Medical Exposure Concerns, Contact the Poison Control Center: 1-800-222-1222

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW: Light brown paste with a strong fermented odor

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

This product does not meet the regulatory definition of a hazardous chemical under 29 CFR 1910.1200. However, good industrial hygiene practices should be used in the manufacture and handling of the product.

Signal Word: None required
Hazard Statement(s): None required
Precautionary Statement(s): None required
Response: See section 4 for first aid measures
Storage: See section 7 for storage information
Disposal: See section 13 for disposal information

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %*
Rhizobium	No hazardous ingredients	
Water	7732-18-5	

*Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

SECTION 4: FIRST AID MEASURES

IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Call poison control center or doctor for treatment advice
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IF ON SKIN OR CLOTHING:	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 INHALED:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice
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 give anything to an unconscious person
Note to Physician: Treat symptomatically	
Most important symptoms/effects, acute and delayed: May cause eye, skin and/or respiratory tract irritation.	

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point:	None
Auto Ignition Temp:	N/A
Explosive Limits:	LEL: Not applicable. UEL: Not applicable.
Suitable Extinguishing Media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media:	None known
Hazardous Combustion Products:	Thermal decomposition may include toxic and irritating gases.
Special Protective Equipment & Precautions:	Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.
Unusual Fire & Explosion Hazards:	None known
Fire Fighting Instructions:	No special requirements.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	See Section 8 for personal protection equipment.
Environmental Precautions:	Do not allow spilled product to enter sewers or waterways.
Methods for Containment:	Contain spilled product by diking area with sand or earth.
Methods for Clean-up:	Vacuum, scoop or sweep up material and place in a container for disposal. Do not place spilled material back in original container. Wash area with water.
Other Information:	Spilled liquid may cause slippery residue on hard floors

SECTION 7: HANDLING AND STORAGE

Handling:	Ensure adequate ventilation during handling and use. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.
Storage:	Store in a secured area away from children, feed and food products. Store in original container only. Open package only when ready to use. Use before expiration date printed on package.
Storage Temperature (Min/Max):	Keep containers tightly closed in a freezer. Store product at -5.8° F or lower (-21° C or lower.)

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Product Incompatibilities: Some seed-applied chemicals, including fungicides, may be harmful to the bacteria in this product. See product label for further information on the use of fungicides or other chemicals in conjunction with seed treatment.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

COMPONENT	OSHA PEL	ACGIH TLV	NIOSH REL
Rhizobium	N/E	N/E	

Engineering Controls: Special ventilation is not required for the normal handling and use of this product when following the label instructions.

Respiratory Protection: None required when used according to label instructions.

Eye Protection: Wear chemical goggles or safety glasses. Contact lenses are not protective eye devices.

Protective Gloves: Wear impermeable gloves.

Other Protective Clothing: No special requirements.

General Safety Measures: Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brownish paste	Upper/Lower Flammability Limits:	Not determined
Odor:	Mild	Vapor Pressure:	Not determined
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH:	6.5 to 7.4	Relative Density:	Not determined
Freezing Point:	25° F (-4° C)	Solubility (water):	Soluble in water
Melting Point:	Not determined	Partition Coefficient:	Not determined
Boiling Point/Range:	216° F (102° C)		
Flash Point:	Not applicable	Auto-ignition Temperature:	Not determined
Evaporation Rate:	Not determined	Decomposition Temperature:	Not determined
Flammability:	Not applicable	Viscosity:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	None known
Chemical Stability:	Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions:	Will not occur
Conditions to Avoid:	Extreme temperatures
Incompatible Materials:	Some seed-applied chemicals, including fungicides, may be harmful to the bacteria in this product. See product label for further information on the use of fungicides or other chemicals in conjunction with seed treatment.

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Hazardous Decomposition Products: Oxides of carbon

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eye contact, Skin contact, Inhalation, Ingestion
Symptoms of Exposure: May cause eye, skin and/or respiratory tract irritation.
Oral LD₅₀: LD50 (oral-rat): >5,000 mg/kg
Dermal LD₅₀: LD50 (dml-rbt): >2,000 mg/kg
Inhalation LC₅₀: No data available
Eye Irritation/Damage: Not anticipated to cause eye irritation based upon component data
Skin Corrosion/Irritation: Not anticipated to cause skin irritation based upon component data
Skin Sensitization: Not a skin sensitizer based upon component data

Chronic/Sub-chronic Toxicity: No data available
Mutagenicity: No data available
Reproductive Toxicity: No data available
Neurotoxicity: No data available
Target Organs: No data available
Aspiration Hazard: No data available
Carcinogenicity: The chemical information below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
None listed				

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY DATA: This product is biodegradable.

Fish Toxicity: No data available
Aquatic Invertebrate Toxicity: No data available
Aquatic Plant Toxicity: No data available
Avian Toxicity: No data available
Honeybee Toxicity: No data available

ENVIRONMENTAL

EFFECTS:

Persistence and Degradability: No data available
Bioaccumulation: No data available
Mobility: No data available
Other Adverse Effects: No data available



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SECTION 13: DISPOSAL CONSIDERATIONS

- Waste Disposal:** Small amounts of product which cannot be used according to label instructions may be disposed of in a landfill or sanitary sewer.
- Container Disposal:** Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations. See pesticide label for full instructions on container disposal.
- RCRA Characteristics:** It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

SECTION 14: TRANSPORTATION INFORMATION

- DOT (Ground):** This product is not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment.
- IMDG (Sea):** This product is not regulated by the IMDG as a hazardous material for shipment by sea.
- IATA (Air):** This product is not regulated by the IATA as a hazardous material for shipment by air.

SECTION 15: REGULATORY INFORMATION

TSCA Inventory: All components are listed or exempt from listing.

SARA Title III Information:

Section 302 – Extremely hazardous substances: None listed

Section 311/312 – Hazard Categories: None

Section 313 – This product contains no reportable components.

Chemical Name	CAS Number	Weight %
None listed		

CERCLA – This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Chemical Name	CAS Number	RQ	Quantity of Finished Product
None listed			

CALIFORNIA PROPOSITION 65:

Chemical Name	CAS Number	Prop 65 Category(ies)
None listed		

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
None listed			



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SECTION 16: OTHER INFORMATION

NFPA	Health Hazards 0	Flammability 0	Instability 0	Special Hazards – None
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