

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : RACEREADY ICNOCULANT - Trich :
Product code 8020, 8030

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Seed treatment

1.3. Supplier

Meristem Crop Performance
489 Village Park Dr.,
Powell, OH 43065
833-637-4783

1.4. Emergency telephone number

Emergency number : CHEMTREC : +1 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Precautionary statements (GHS US) : P280 - Wear protective gloves, protective clothing, eye protection, face protection.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Microorganisms can potentially cause sensitisation reactions.

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Glycerol	CAS-No.: 56-81-5	15 – 25	Not classified
<i>Trichoderma virens</i>	-	1 – 5	Not classified

Full text of hazard classes and H-statements : see section 16

RACEREADY INOCULANT - TRICH

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Move the affected person to the fresh air. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Wash with water and soap as a precaution. Get medical advice if skin irritation persists.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Consult an ophthalmologist if irritation persists.
First-aid measures after ingestion	: Rinse mouth out with water. Get medical advice/attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: Microorganisms can potentially cause sensitisation reactions.
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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing agent suitable for surrounding fire.
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5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon oxides (CO, CO ₂).
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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Cool down the containers exposed to heat with a water spray. Contain the extinguishing fluids by bunding.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Complete protective clothing. Self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Ventilate spillage area.
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6.1.1. For non-emergency personnel

Emergency procedures	: Avoid contact with skin and eyes. Avoid breathing vapors.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment.
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6.2. Environmental precautions

Contain the spilled material by bunding. Prevent liquid from entering sewers, watercourses, underground or low areas.

6.3. Methods and material for containment and cleaning up

For containment	: Take up liquid spill into inert absorbent material.
Methods for cleaning up	: Hose down area with water.
Other information	: Collect all waste in suitable and labeled containers and dispose according to local legislation.

6.4. Reference to other sections

Concerning personal protective equipment to use, see item 8. Concerning disposal elimination after cleaning, see item 13.

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Safety Data Sheet

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing vapors. Handle in accordance with good agricultural, health and safety practice.
Hygiene measures : Do not drink, eat or smoke in the workplace. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children.
Incompatible materials : Strong oxidizing agents.
Special rules on packaging : Store in original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)	
USA - OSHA - Occupational Exposure Limits	
Local name	Glycerin (mist)
OSHA PEL (TWA) [1]	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure that there is a suitable ventilation system.
Environmental exposure controls : Avoid sub-soil penetration.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves. Breakthrough time : refer to the recommendations of the supplier
Eye protection:
Safety glasses
Skin and body protection:
Protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Green-brown
Odor : No data available
Odor threshold : No data available

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pH	: 6.8
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.039
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Not explosive.
Oxidizing properties	: Non oxidizing.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None to our knowledge.

10.4. Conditions to avoid

None to our knowledge.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Glycerol (56-81-5)	
LD50 oral rat	11500 mg/kg (Published data)

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Glycerol (56-81-5)	
LD50 dermal	56750 mg/kg (Guinea pig)(Published data)
LC50 inhalation rat (mg/l)	> 5.85 mg/l/4h (spray)(Published data)

Skin corrosion/irritation	: Not classified pH: 6.8
Serious eye damage/irritation	: Not classified pH: 6.8
Respiratory or skin sensitization	: Not classified Microorganisms can potentially cause sensitisation reactions
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: Microorganisms can potentially cause sensitisation reactions.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Shovel into suitable and closed container for disposal.
Product/Packaging disposal recommendations	: Dispose of in accordance with relevant local regulations.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			

RACEREADY INOCULANT - TRICH

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT	TDG	IMDG	IATA
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
Not regulated	Not regulated	Not regulated	Not regulated

14.6. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Glycerol	56-81-5	Present	Active	
<i>Trichoderma virens</i>		Not present	-	

Glycerol (56-81-5)

Not subject to reporting requirements of the United States SARA Section 313

Trichoderma virens

Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations

CANADA

Glycerol (56-81-5)

Listed on the Canadian DSL (Domestic Substances List)

RACEREADY INOCULANT - TRICH

Safety Data Sheet

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Trichoderma virens

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

Glycerol (56-81-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Trichoderma virens

Not listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Private Label for Meristem - Trich

All components of this product are present and listed as Active, or excluded from the directory, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory SARA 313

This product contains no chemicals in excess of the applicable de minimis concentration that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (Table 372.65).

Except *Trichoderma virens*, all chemical substances in this product are listed on the Canadian DSL (Domestic Substances List)

All chemical substances in this product are listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) except *Trichoderma virens*

15.3. US State regulations

Private Label for Meristem - Trich

U.S. - California - Proposition 65 - Other information

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Glycerol(56-81-5)	U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date : 04/4/2024

Data sources : ECHA (European Chemicals Agency). SDS of suppliers.

Abbreviations and acronyms

DOT	Department of Transportation (DOT)
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
TDG	Transportation of Dangerous Goods

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: RACEREADY INOCULANT – Bradyrhizobium spp.

Product Code: 8020, 8030

1.2. Intended Use of the Product

Seed treatment

1.3. Name, Address, and Telephone of the Responsible Party

Meristem Crop Performance
489 Village Park Dr.,
Powell, OH 43065
833-637-4783

1.4. Emergency Telephone Number

Emergency Number : +1 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Not classified

2.2. Label Elements

GHS-US/CA Labeling

No labeling applicable according to 29 CFR 1910.1200 and the Hazardous Products Regulations (HPR) SOR/2015-17.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Bradyrhizobium spp.	Nitrogen fixing bacteria	None	80	Not classified

Full text of H-statements: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Wash with plenty of soap and water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

RACEReady INOCULANT – Bradyrhizobium spp.

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding type of fire.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: None known.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: No special measures required.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent unintended entry to sewers and public waters, especially in large quantities.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up any spills as soon as possible, using an absorbent material to collect it. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from Extremely high or low temperatures, direct sunlight.

Incompatible Materials: None known.

7.3. Specific End Use(s)

Agriculture

RACEREADY INOCULANT– Bradyrhizobium spp.

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

8.2. Exposure Controls

Appropriate Engineering Controls: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Beige to light brown
Odor	: Mild
Odor Threshold	: No data available
pH	: 6.5 – 7.4
Evaporation Rate	: No data available
Melting Point	: 25 °F (-3.89 °C)
Freezing Point	: 25 °F (-3.89 °C)
Boiling Point	: 216 °F (102.22 °C)
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: No data available
Upper Flammable Limit	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Density	: 1 g/cc
Specific Gravity	: No data available
Solubility	: Insoluble in water.
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability:

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

RACEREADY INOCULANT– Bradyrhizobium spp.

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

10.4. Conditions to Avoid:

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible Materials:

None known.

10.6. Hazardous Decomposition Products:

None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data:

No additional information available

Skin Corrosion/Irritation: Not classified

pH: 6.5 – 7.4

Eye Damage/Irritation: Not classified

pH: 6.5 – 7.4

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

No additional information available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

12.2. Persistence and Degradability

ABI 120 – Bradyrhizobium spp.	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

ABI 120 – Bradyrhizobium spp.	
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil

ABI 120 – Bradyrhizobium spp.	
Ecology - Soil	Not established.

12.5. Other Adverse Effects

Other Adverse Effects: None known.

Other Information: Avoid unintended release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Treatment Methods: Can be landfilled or incinerated, when in compliance with local regulations.

Sewage Disposal Recommendations: Do not dispose of waste into sewer.

RACEREADY INOCULANT– *Bradyrhizobium* spp.

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Empty containers may be recycled after cleaning.

Ecology - Waste Materials: Avoid unnecessary release into the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Not regulated for transport

14.2. In Accordance with IMDG

Not regulated for transport

14.3. In Accordance with IATA

Not regulated for transport

14.4. In Accordance with TDG

Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Neither this product nor its chemical components appear on any US federal agency lists, or its chemical components are not required to be disclosed.

15.2. US State Regulations

Neither this product nor its chemical components appear on any US state lists, or its chemical components are not required to be disclosed.

15.3. Canadian Regulations

Neither this product nor its chemical components appear on any Canada federal or provincial lists, or its chemical components are not required to be disclosed.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 04/4/2024

Revision

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

The information in this SDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the use, handling, storage and disposal of this product are beyond our control, it is the responsibility of the user both to determine safe conditions for the use of this product and to assume liability of loss, damage, or expense arising out of the product's improper use. No warranty expressed or implied regarding the product described herein shall be created by or inferred from any statement or omission in this SDS. Various Federal, State or Provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in this SDS. The user should review these regulations to ensure full compliance.

NA GHS SDS 2015 (Can, US)

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : RACEREADYINOCULANT -Extender : 8020,
Product code 8030

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Seed treatment

1.3. Supplier

Meristem Crop Performance
489 Village Park Dr.,
Powell, OH 43065
833-637-4783

1.4. Emergency telephone number

Emergency number : CHEMTREC : +1 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Specific target organ toxicity (repeated exposure) Category 1 H372 Causes damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H372 - Causes damage to organs through prolonged or repeated exposure
Precautionary statements (GHS US) : P260 - Do not breathe vapors.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P314 - Get medical advice/attention if you feel unwell.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : May cause eye, skin and respiratory system irritation.

2.4. Unknown acute toxicity (GHS US)

Not applicable

RACEREADY INOCULANT-Extender

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	CAS-No.: 14807-96-6	< 3	STOT RE 1, H372

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Move the affected person to the fresh air. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Wash skin thoroughly with mild soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.
First-aid measures after ingestion	: Rinse mouth out with water. Drink plenty of water. Induce vomiting if victim completely conscious/alert. Get medical advice/attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: May be irritating to the respiratory system.
Symptoms/effects after skin contact	: May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Chronic symptoms	: Causes damage to organs (lungs) through prolonged or repeated exposure (if inhaled).

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water. Foam. Dry powder. Carbon dioxide (CO₂).

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO₂).

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Contain the extinguishing fluids by bunding.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Complete protective clothing. Wear a self contained breathing apparatus. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ventilate spillage area.

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6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with skin, eyes and clothing. Do not breathe vapors. Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Emergency procedures : Do not attempt to take action without suitable protective equipment.

6.2. Environmental precautions

Contain the spilled material by bunding. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Take up liquid spill into absorbent material.
Methods for cleaning up : Wash contaminated area with large amounts of water. Put into a labeled container and provide safe disposal.

6.4. Reference to other sections

Concerning personal protective equipment to use, see item 8. Concerning disposal elimination after cleaning, see item 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing. Do not breathe vapors. Mix well before use. Add water to dilute it if necessary. Handle in accordance with good industrial hygiene and safety practice.
Hygiene measures : Do not drink, eat or smoke in the workplace. Wash hands and other exposed areas with soap and water before leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, well-ventilated area. Keep container closed when not in use. Do not store for prolonged periods at elevated temperatures. Protect from repeated freezing and thawing. Keep out of the reach of children.
Storage temperature : > 32 °F
Special rules on packaging : Store in original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available	
Talc (Mg ₃ H ₂ (SiO ₃) ₄) (14807-96-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Talc
ACGIH OEL TWA	2 mg/m ³ (Containing no asbestos fibers. E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica, R - Respirable particulate matter) 2 mg/m ³ (Containing asbestos fibers. R - Respirable particulate matter)
ACGIH OEL TWA [ppm]	0.1 fibers/cm ³ (Containing asbestos fibers. F - Respirable fibers)

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Talc (Mg ₃ H ₂ (SiO ₃) ₄) (14807-96-6)	
Remark (ACGIH)	Containing no asbestos fibers = TLV® Basis: Pulm fibrosis; pulm func. Notations: A4 Containing asbestos fibers = TLV® Basis: Pneumoconiosis; lung cancer; mesothelioma. Notations: A1 (Confirmed Human Carcinogen)
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Talc (not containing asbestos) (Silicates (less than 1% crystalline silica))
OSHA PEL (TWA) [2]	20 mppcf
Remark (OSHA)	Table Z-3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure that there is a suitable ventilation system.
Environmental exposure controls : Avoid discharge of the product as is into the environment.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:
Wear suitable protective clothing
Hand protection:
Protective gloves made of rubber. Breakthrough time : refer to the recommendations of the supplier
Eye protection:
Safety glasses
Respiratory protection:
In the event of insufficient ventilation: Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors, Dusts and Mists.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : No data available
Odor : No data available
Odor threshold : No data available
pH : 4.5 – 6.8
Melting point : No data available
Freezing point : 28 – 32 °F
Boiling point : 212 °F
Flash point : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Vapor pressure : Insignificant
Relative vapor density at 20 °C : No data available
Relative density : 1.03 – 1.15
Density : 8.55 - 9.5 Pound/gallon
Solubility : Water: Dispersible
Partition coefficient n-octanol/water (Log Pow) : No data available

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Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 60 – 250 cP
Explosion limits	: No data available
Explosive properties	: Not explosive.
Oxidizing properties	: Non oxidizing material.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Polymerization can occur.

10.4. Conditions to avoid

Extremely high or low temperatures. Protect from freezing.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified pH: 4.5 – 6.8
Serious eye damage/irritation	: Not classified pH: 4.5 – 6.8
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: May be irritating to the respiratory system.
Symptoms/effects after skin contact	: May cause skin irritation.

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Symptoms/effects after eye contact : May cause eye irritation.
Chronic symptoms : Causes damage to organs (lungs) through prolonged or repeated exposure (if inhaled).

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Collect all waste in suitable and labeled containers and dispose according to local legislation.
Additional information : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Not applicable	Not applicable	Not applicable	Not applicable

14.6. Special precautions for user

DOT

No data available

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TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6	Present	Active	

Talc (Mg₃H₂(SiO₃)₄) (14807-96-6)

Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations

CANADA

Talc (Mg₃H₂(SiO₃)₄) (14807-96-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Talc (Mg₃H₂(SiO₃)₄) (14807-96-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

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All components of this product are present and listed as Active, or excluded from the directory, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory SARA 313

This product contains no chemicals in excess of the applicable de minimis concentration that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (Table 372.65).

All chemical substances in this product are listed on the Canadian DSL (Domestic Substances List)

All chemical substances in this product are listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.3. US State regulations

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U.S. - California - Proposition 65 - Other information

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

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Component	State or local regulations
Talc (Mg ₃ H ₂ (SiO ₃) ₄)(14807-96-6)	U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Data sources : ECHA (European Chemicals Agency). SDS of suppliers.

Full text of H-phrases	
H372	Causes damage to organs through prolonged or repeated exposure

Abbreviations and acronyms	
DOT	Department of Transportation (DOT)
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
TDG	Transportation of Dangerous Goods

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.