

Safety Data Sheet

1. Product Name and Company Information

Product Name: **MaintaiN**

Supplier: MERISTEM
1276 Lakemoore Dr.
Woodbury, MN 55129

Telephone: (651) 270-8282

EMERGENCY TELEPHONE NUMBER
(651) 270-8282

2. Hazards Identification

Health Hazards

Acute Oral Toxicity: Category 4



Signal Word: Warning

Hazard Statement:

Harmful if Swallowed

Emergency Overview

Color: Clear

Physical State: Liquid.

Odor: Mild odor

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Warning!

Potential Health Effects

Eye Contact: May cause slight temporary eye irritation. Corneal injury is unlikely. Mist may cause eye irritation.

Skin Contact: Prolonged contact is essentially nonirritating to skin. Repeated contact may cause drying, flaking and softening of skin.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Inhalation: At room temperature, exposure to vapor is minimal due to low volatility. Mist may cause irritation of upper respiratory tract (nose and throat).

Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Aspiration hazard: Based on physical properties, not likely to be an aspiration hazard.

Precautionary Statements:

Wash thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

If in eyes: Rinse cautiously with water for several minutes. Remove any contact lenses, call CHEMTREC

Store in dry place. Store in a closed container.

3. Composition Information

Component	CAS #	Amount
Ca-Heteropolysaccharides	Mixture	>5.0%
Ca-Aminoethylpiperazine	Mixture	>6.0%
Alkylaryl polyoxethylene glycols	Mixture	>22.0%

4. First Aid Measures

Description of first aid measures

General advice: If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Skin Contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Remove contaminated clothing and shoes. If irritation persists seek medical attention.

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs keep head low so that stomach content doesn't get into the lungs. Do not use mouth to mouth.

Indication of immediate medical attention and special treatment needed

In case of an accident or unwellness, seek medical attention immediately

5. Fire Fighting Measures

Suitable extinguishing media: Water fog or fine spray, Dry chemical fire extinguishers, Carbon dioxide fire extinguishers, Foam.

Extinguishing Media to Avoid: Do not use direct water stream. May spread fire.

Specific Hazards arising from the substance or mixture: Avoid inhaling the fumes

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reigniting has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or a safe distance.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Spilled material may cause a slipping hazard. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Absorb with inert material and dispose of in accordance with applicable regulations (Disposal Section 13)

7. Handling and Storage

General Handling: Do not eat or drink while working. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contaminated clothing should be changed before entering eating areas. See section 8 for protective equipment.

Storage

Store away from direct sunlight or ultraviolet light. Keep container tightly closed when not in use. Store in a dry place. Protect from atmospheric moisture.

Store in the following material(s): Stainless steel. Aluminum. Plaste 3066 lined container. 316 stainless steel. Opaque HDPE plastic container.

Shelf life: Use within 12.0 Months

8. Exposure Controls and Personal Protection

Personal Protection

Eye/Face Protection: Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin Protection: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Hand protection: Wear appropriate protective gloves to prevent skin exposure. Consistent with general hygienic practice for any material, skin contact should be minimized.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In misty atmospheres, use an approved particulate respirator. The following should be effective types of air purifying respirators: Organic vapor cartridge with a particulate prefilter.

Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

9. Physical and Chemical Properties

Appearance

Physical State	Liquid.
Color	Clear
Odor	Mild odor
Odor Threshold	No test data available
pH	5.0-6.0
Freezing Point	32 ° F
Flash Point	Closed Cup 102 °C

Evaporation Rate	Not Established
Vapor Pressure	No test data available
Specific Gravity	(H ₂ O = 1) 1.45
Solubility in water (by weight)	Dispersible
Autoignition Temperature	No test data available
Decomposition Temperature	No test data available
Viscosity	Not available
Liquid Density	12.0 lbs/gal

10. Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions. See Storage, Section 7

Possibility of hazardous reactions Stable under normal conditions

Conditions to Avoid: Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight or ultraviolet sources. Stable under normal conditions.

Incompatible Materials: Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials.

Decomposition products can include and are not limited to: Aldehydes. Alcohols. Ethers. Organic Acids.

11. Toxicological Information

Routes of Exposure: Eye Contact: May cause irritation. Skin contact: Can be absorbed, may cause irritation.

Inhalation: Unknown Ingestion: Unknown

Exposure Symptoms: Burning and skin damage. Eye irritation-stinging, tearing, redness, swelling, and blurred vision. Allergic skin reaction some redness and rash.

Acute and Chronic effects: Components may be absorbed into the body through the skin. Contact may irritate or burn eyes. Prolonged inhalation may be harmful. Prolonged exposures may cause chronic effects.

Acute Toxicity

Oral

Dose levels: 175, 550, 1750, 5000 mg/kg. After testing each dose level the Acute Oral LD₅₀ is 1750 mg/kg in female rats.

Dermal

All animals survived after being exposed to the test substance. The Acute Dermal toxicity is greater than 5000 mg/kg.

Eye damage/eye irritation

Mildly irritation. With irritation cleared by Day 14. Average irritation score of 12.3.

Skin corrosion/irritation

N/A

Carcinogenicity

N/A

12. Ecological Information

Toxicity

Material is practically non-toxic to aquatic organisms on an acute basis.

Ecological information of the mixture:

Aquatic Acute Toxicity

EC50 Algae: N/A

LC50 Crustacea: N/A

LC50 Fish: N/A

Persistence and Degradability

Material is readily biodegradable.

Bioaccumulative potential

Ecological information of the mixture:

Bioaccumulation: No data available

Mobility in Soil

Ecological information of the substance:

Mobility in Soil: N/A

Other adverse effects:

None

Use according to criteria of good industrial practice, avoiding product dispersion in the environment.

13. Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. If possible recover the product, otherwise dispose of in authorized landfill. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL.

14. Transport Information

DOT Non-Bulk

Not Regulated

DOT Bulk

Not Regulated

15. Regulatory Information

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Hazardous Categories

Immediate (Acute) Health Hazard	No
Delayed (Chronic) Health Hazard	No
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

CERCLA Hazardous Substances List (40 CFR 302.4) Not Listed

Clean Air Act, SARA 312 No Hazardous Air Pollutants (HAPs)

SARA 311 Hazardous Substances No

SARA 302 Extremely Hazardous Substances No

US. Toxic Substances Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720

16. Other Information

Hazard Rating System	Health	Fire	Reactivity
NFPA	0	1	0

Date of Preparation: 12/7/2018

The information above is believed to be accurate and represents the best information currently available to us. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

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