

MATERIAL SAFETY DATA SHEET

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Section 1	Identification
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Product Name: GR 16S

Standard Chemical Name:	Hydroxypropyl Guar Hydroxypropyltrimonium Chloride
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Section 2	Composition/Data on components
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Chemical Name	CAS No.	Content %
Hydroxypropyl Guar Hydroxypropyltrimonium Chloride	71329-50-5	≥90
Water	7732-18-5	≤10

Section 3	Hazard Identification
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Physical Hazards: Fire and Explosion Hazards: Airborne dusts can cause dust explosions when exposed to ignition sources.

Health Hazards: Causes eye damage/eye irritation.

Environmental hazards: hazards to the aquatic environment, long-term hazards to the aquatic environment.

OSHA-Defined Hazards: Not Classified.

Hazard Statements: Not classified.

precautionary statement:

Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. No smoking floor/bonding containers and receiving equipment. Use explosion-proof electrical/ventilation/lighting equipment. Only use non-spark tools. Take precautions against electrostatic discharge. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/eye protection/face protection.

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Response:

If on skin (or hair): Take off all contaminated clothing immediately. Rinse skin with water/shower.

Section 4	First aid measures
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Inhalation: Move to fresh air. Call your doctor if symptoms develop or persist.

Skin Contact: Take off all contaminated clothing immediately. Rinse skin with water/shower. If irritation develops and persists, seek medical attention.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present; continue rinsing. If eye irritation persists: Get medical advice/care.

Ingestion: Gargle. When symptoms appear, seek medical attention.

Most important symptoms/effects, acute and delayed:

Exposed individuals may experience tearing eyes, redness and discomfort.

Indicates the need for immediate medical attention and special treatment:

Provide general supportive measures and treat symptoms. Thermal burns: Flush immediately with water. When rinsing, remove clothing that does not adhere to the affected area. call the ambulance. Continue flushing during transport to hospital. Observe the victim. Symptoms may be delayed.

General Information:

Take off all contaminated clothing immediately. Make sure medical personnel understand the materials involved and take precautions to protect themselves. Wash contaminated clothing before reuse.

Section 5	Fire fighting measures
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Suitable Extinguishing Media:

Water mist foam. carbon dioxide (CO₂). Dry chemical powders, carbon dioxide, sand should only be used on small fires.

Do not use a sprinkler as a fire extinguisher as this will spread the fire.

Unsuitable extinguishing media: Do not use a sprinkler as a fire extinguisher as this will spread the fire.

Specific hazards caused by chemicals:

Vapors may form explosive mixtures with air. Vapors may travel considerable distances to the

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ignition source and flashback. This product has poor electrical conductivity and can be electrostatically charged. Ignition of flammable mixtures may occur if sufficient charge is accumulated. To reduce the possibility of electrostatic discharge, use proper bonding and grounding procedures. This liquid may build up static electricity when filling properly grounded containers. The presence of small amounts of water or other contaminants can significantly increase static buildup. The material will float and may ignite on the surface of the water. During a fire, gases that are harmful to health may be formed.

Special protective equipment and precautions for firefighters:

In the event of a fire, self-contained breathing apparatus and full protective clothing must be worn.

Fire Equipment/Instructions:

In the event of fire and/or explosion, do not breathe fumes. Remove container from fire area, if it can be moved without risk.

Specific methods General fire hazards:

Use standard firefighting procedures and consider the hazards of other relevant materials.

Section 6	Accidental release measures
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Personal Precautions, Protective Equipment and Emergency Procedures:

Stay away from unnecessary people. Keep people away from leaks/leakages. Eliminate all sources of ignition (no smoking, flares, sparks or flames in the vicinity). Wear appropriate protective gear and clothing during cleaning. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate them before entering enclosed spaces. Use a proper seal to avoid environmental contamination. Transfer the recycling tank or other suitable container to recycling or safe disposal by mechanical means such as a vacuum truck. If a serious spill cannot be contained, local authorities should be notified. For personal protection, see SDS.

Section 7	Handling and storage
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Safe Operation Precautions:

Vapors may form explosive mixtures with air. Do not handle, store or open near open flames, heat or ignition sources. Protect material from direct sunlight. do not smoke. Minimize the risk of fire from flammable and combustible materials (including combustible dusts and static accumulating liquids) or dangerous reactions with incompatible materials. Processing

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operations that can promote static buildup include, but are not limited to: mixing, filtration, high flow pumping, splash filling, creating mist or spray, tank and container filling, tank cleaning, sampling, measuring, switch loading, vacuum truck operations . Take precautions to prevent electrostatic discharge. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid eye contact. Avoid prolonged contact. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not pour into drains.

Conditions for safe storage, including any incompatibilities:

Keep away from heat, sparks and open flames. Prevent static buildup using common bonding and grounding techniques. Avoid spark starters. Eliminate ignition sources. Ground/bond containers and equipment. These alone may not be enough to remove static electricity. Store in the original tightly closed container. Store in a cool, dry place, out of direct sunlight. Store in a well-ventilated place. Refrigeration is recommended. Store incompatible materials (see SDS Section 10). Place in an area with sprinklers.

Section 8		Exposure Control and Personal Protection
8.1	Transportation:	This product may present a dust explosion hazard. It is recommended that all dust control equipment and material transport systems involved in handling this product contain explosion vents or explosion suppression systems or an oxygen deficient environment. Electrical connection and grounding. This powder should not flow through non-conductive pipes. Use only properly classified electrical equipment.
8.2	Storage:	Store in a cool dry airtight container.
8.3	unsuitable packaging	/

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Section 9	Physical and Chemical Information
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9.1.	Physical form	Powder
9.2	Color	Creamy white powder
9.3	Odor	Negligible
9.4	pH (1.0%)	9.0-10.5
9.5	Water soluble	Soluble
9.6	Oxidation properties	N/A
9.7	Bulk specific gravity:	0.63(25°C)
9.8	Loss on drying (105°C/2h):	≤10%
9.9	Nitrogen%	1.0-1.7

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Section 10	Stability and reactivity
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Reactivity	The product is stable and unresponsive under normal conditions of use, storage and transport.
Chemical Stability	The material is stable under normal conditions.
Possibility of hazardous reactions	Under normal conditions of use, there are no hazardous reactions.
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures above the flash point. Avoid contact with incompatible materials.
Incompatible Materials	Acid. Strong oxidants. Isocyanates. Chlorine.
Hazardous Decomposition Products	No hazardous decomposition product known.

Section 11	Toxicological information
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Information on possible routes of exposure

Information on possible routes of exposure	May be harmful by prolonged inhalation.
Inhalation	Adverse effects from skin contact are not expected.
Skin contact	Eye irritation.
Eye contact	Expected to be low risk of ingestion.
Ingestion	Exposed individuals may experience tearing eyes, redness and discomfort.

Section 12	Ecological information
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12.1	Potential risk of bioaccumulation:	Unknown.
12.2	Aquatic toxicity:	Not sure.

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Section 13	Disposal considerations
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13.1	Product Disposal:	According to local regulations
13.2	Packaging Disposal:	Empty containers may contain product residue; follow MSDS and label warnings even if emptied

Section 14	Transport Information
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- 14.1 Road and Rail Transport: Not assessed.
- 14.2 Ocean Freight (IMDG): Not subject to the IMDG specification.
- 14.3 Air Transport (ICAO): Not subject to ICAO regulations.

Section 15	Regulatory Information
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Chemical list:

AICS: All ingredients listed or exempt.

DSL: All chemicals in this material are either included in the DSL or not.

IECSC: All ingredients listed or exempt.

MITI: All components are listed in ENCS or its exemption rules.

KECL: All ingredients listed, exempted or notified.

EINECS: All ingredients listed or exempt.

PICCS: All ingredients listed or exempt.

TSCA: All chemicals in this material are included or not on the TSCA Chemical Substances Inventory.

Section 16	Other Information
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This Safety Data Sheet has been prepared based on the latest information we know so far about the safety and proper use of this product. Since it is impossible to predict and control the situation that this product will face in actual use, every user should read this instruction carefully before using this product. For more information to ensure a correct assessment, please contact the company.