Safety Data Sheet

H-TEC HTMB Series

MSDS No. 9642.21

Date of Preparation: 7/16/98

Revision: 9/26/13

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: H-TEC HTMB Series

Manufacturer: Marshall Additive Technologies Division of the R. J. Marshall Company 26776 W. 12 Mile Road Southfield, MI 48034-7807 Phone: (248) 353-4100, Fax: (248) 948-6460

Emergency Phone: (800) 424-9300 **Date Revised:** 9/26/13 **Preparer:** Stephanie Nichols

Section 2 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Potential Health Effects

This product does not meet the criteria for classification as ahzardous as defined in the Rgulation EC 1272/20008 and in Directive 67/548/EEC.

Depending on the type of handling and use (e.g. grinding, drying), airborne respirable crystalline silica may be generated. Prolonges and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled. This product should be handled with care to avoid dust generation.

Label elements: None HMIS Rating: H: 1 F: 0 R: 0

Section 3 - Composition / Information on Ingredients

Ingredient Name	CAS Number	Percent by Weight	Other
Magnesium Hydroxide	1309-42-8	>80%	
Crystalline Silica (Respirable fraction)	14808-60-7	<1%	R48/20; H372

R-phrase: R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation. H-statement: H372: Causes damage to lung through prolonged or repeated exposure by inhalation.

Section 4 - First Aid Measures

Inhalation: Remove victim to fresh air. Consult a doctor in the event of any complaints.

Eye Contact: Flush eyes thoroughly for 15 minutes taking care to rinse under eyelids. Do not scrub. Abrasion may cause irritation. After initial flushing, remove any contact lenses and continue flushing. If irritation persists, consult a physician. **Skin Contact:** No special first aid measures necessary.

Ingestion: No first aid measures required.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: No special first aid measures necessary.

Section 5 - Fire-Fighting Measures

Extinguishing Media: Not combustible. All types of extinguishing agent permitted.

Unusual Fire or Explosion Hazards: None known.

Hazardous Combustion Products: None.

Fire-Fighting Instructions: No specific fire-fighting protection is required.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Avoid dry sweeping. Use water spray or vacuum to prevent airborne dust generation. Use appropriate protection. Collect spilled material in sealable containers. Recycle if possible. **Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid generating dust during handling. Wear personal protective equipment as necessary. Storage Requirements: Keep containers closed. Keep away from heat and stong acids.

H-TEC HTMB Series

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Use local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. **Respiratory Protection:** With sufficient extraction or closed system, breathing apparatus not necessary. In the event of possible exposure, use dust filter P2.

Protective Clothing/Equipment: Wear safety glasses and gloves as necessary.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Exposure Limits:

	OSHA PEL		ACGIH		
Ingredient TWA		STEL	TWA	STEL	
Magnesium Hydroxide	None estab.	none estab.	None estab.	none estab.	
Crystalline Silica	10mg/m ³ respirable dust	None estab.	0.025mg/m ³ respirable dust	None estab.	

Section 9 - Physical and Chemical Properties

Physical State: powder Appearance and Odor: white odorless Odor Threshold: n/e Vapor Pressure: n/a Vapor Density (Air=1): n/a Formula Weight: n/a Density: n/e Specific Gravity (H₂O=1, at 4 °C): 2.4 pH: 10 @ 10% aqueous solution Decomposition Temp: >300°C (572°F) Flash Point: None known. Flash Point Method: n/a Burning Rate: Not determined. Water Solubility: 9mg/l (20°C) Other Solubilities: soluble in solution of ammonium salts and dilute acids Boiling Point: decomposes Freezing/Melting Point: decomposes Viscosity: n/a Refractive Index: n/a Surface Tension: n/a % Volatile: n/a Evaporation Rate: n/a Auto-ignition Temperature: Not determined. Flammability Classification: Non-flammable.

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions. Release of crystallization water at temperatures above 300°C.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Strong acids will produce vigorous reaction with heat generated. Malaeic anhydride will cause decomposition of material in a runaway explosive reaction. Phosphorous, if boiled with alkaline hydroxide, yields mixed phosphorous which can spontaneously ignite in air.

Conditions to Avoid: To avoid thermal decomposition, do not overheat.

Hazardous Decomposition Products: Steam, acid smoke with trace amount of carbon dioxide and carbon monoxide. If heated to the point of volatilization, (i.e. > 1700C), magnesium oxide fume can be generated.

Section 11- Toxicological Information

Toxicity Data:*

Acute Toxicity: Magnesium Hydroxide is categorized by the US FDA as a Generally Recognized As Safe (GRAS) food ingredient. LD50: >5800 mg/kg bw Test Std: OECD401 Based on available date, Magnesium Hydroxide does not meet the classification criteria for Skin corrosion/irritation, Serious eye damage/irritation, Respiratory or skin sensitization, Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity, STOT-single or repeated exposure, or Aspiration hazard.

Section 12 - Ecological Information

The data available does not support any environmental hazard.

H-TEC HTMB Series

Section 13 - Disposal Considerations

Disposal: Recycle if possible or landfill. This substance is inert and does not require special disposal methods. Follow applicable Federal, state, and local regulations.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101): This product is not classified as dangerous under the transport regulations for road, rail, sea, or air transport.

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33) RCRA Hazardous Waste Classification: Not classified CERCLA Hazardous Substance (40 CFR 302.4) Not listed SARA Toxic Chemical (40 CFR 372.65): Not listed SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

TSCA

This substance or all of its components are on the Chemical Substances Inventory of the Toxic Substance Control Act (TSCA Inventory [USA]). Please note that this product is not subject to any legal reporting requirements under these acts.

INTERNATIONAL REGULATIONS

Australia: Listed on AICS. Canadian Domestic Substances List: Listed Canada WHMIS: Uncontrolled product China: Listed Europe: Listed on EINECS, # 215-170-3. Japan: Listed on ENCS # 1-386. Korea: Listed on ECL, # KE-22716. Philippines: Listed on PICCS Switzerland: Listed on Giftliste 1, #G-8166, toxic category 4. REACH: Exempt

Section 16 - Other Information

Prepared By: Stephanie Nichols **Revision Notes:** added HTMB2, HTMB4, HTMB10, and HTMB15

Product Grades Available from the R. J. Marshall Company (this list may be incomplete):

HTMB2 HTMB4 HTMB8 HTMB8SA HTMB8ST HTMB10 HTMB15									
	I	HTMB2	HTMB4	HTMB8	HTMB8SA	HTMB8ST	HTMB10	HTMB15	

Disclaimer: Information contained herein is presented in good faith and is based on data believed to be accurate. However no warranty is expressed or implied regarding this information or the results obtained from the use of this Material Safety Data Sheet, whether it originates with The R. J. Marshall Company or others. This Safety Data Sheet relates only to the specific material designated herein. It does not relate to use with other material or processes. This information is supplied with the condition that the user will make appropriate determination as to its suitability for their purpose prior to using it.