

Material Safety Data Sheet

C-TEC LSZ4A, C-TEC LSZ4AF

MSDS No. 9638.5

Date of Preparation: 7/16/96

Revision: 5/9/06

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: C-TEC LSZ4A, C-TEC LSZ4AF

Synonyms: Charring agent.

General Use: Fire retardant.

Manufacturer: Marshall Additive Technologies

Division of the R. J. Marshall Company

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Date Revised: 5/9/06

Preparer: Stephanie Nichols

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	Percent by Weight
Inorganic Filler	-----	Max 85.0
Zinc Compounds	-----	Max 20.0

Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Inorganic Filler	15 mg/m ³	none estab.	10 mg/m ³	none estab.
Zinc Compounds	None estab.	none estab.	None estab.	none estab.

Note: For the purpose of reporting for Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372.0 the maximum percent by weight Zinc content is 12.46.

Section 3 - Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

HMIS

H 1

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R 0

PPE[†] E

[†]Sec. 8

Potential Health Effects

Primary Entry Routes: Inhalation, Eye, and Ingestion.

Acute Effects

Inhalation: Inhalation of high concentrations of this inert nuisance particulate can result in mild irritation of the respiratory tract.

Eye: May cause irritation through mechanical abrasion.

Skin: May cause irritation through mechanical abrasion.

Ingestion: Not applicable.

Carcinogenicity: Neither this product nor any of its components are considered carcinogenic by OSHA, IARC, NTP, ACGIH.

Medical Conditions Aggravated by Long-Term Exposure: Chronic respiratory disease.

Section 4 - First Aid Measures

Inhalation: If overcome by high dust concentrations, remove to a ventilated area.

Eye Contact: Flush eyes thoroughly for 15 minutes taking care to rinse under eyelids. Do not scrub. Abrasion may cause irritation. If discomfort continues, continue to wash with water. If irritation persists, consult a physician.

Skin Contact: Wash skin thoroughly with soap and water for at least 15 minutes. Consult a physician if irritation persists.

Ingestion: Not applicable.

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

Note to Physicians: n/a

Special Precautions/Procedures: n/a

Section 5 - Fire-Fighting Measures

Flash Point: n/a

Flash Point Method: n/a

Burning Rate: Not determined.

Auto-ignition Temperature: Not determined.

Flammability Classification: Non-flammable.

Extinguishing Media: Water spray, carbon dioxide, or other dry chemical.

Unusual Fire or Explosion Hazards: None known.

Hazardous Combustion Products: None known.

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face-piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures: Collect solids. 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.

Storage Requirements: Keep material dry.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.

Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

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.

Section 9 - Physical and Chemical Properties

Physical State: powder

Appearance and Odor: white odorless powder

Odor Threshold: n/e

Vapor Pressure: n/a

Vapor Density (Air=1): n/a

Formula Weight: n/a

Density: n/a

Specific Gravity (H₂O=1, at 4 °C): 3.2

pH: n/e

Water Solubility: Slightly soluble

Other Solubilities: n/a

Boiling Point: n/a

Freezing/Melting Point: n/a

Viscosity: n/a

Refractive Index: n/a

Surface Tension: n/a

% Volatile: n/a

Evaporation Rate: n/a

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: None known.

Conditions to Avoid: None known.

Hazardous Decomposition Products: n/a

Section 11- Toxicological Information

Toxicity Data:*

Eye Effects: Nuisance dust. May cause irritation through mechanical abrasion. Flush with water for at least 15 minutes. Consult physician if irritation is persistent.

Acute Inhalation Effects: Nuisance dust. Overexposure to dust may cause irritation to the respiratory tract. Should this occur, remove affected individual to fresh air. If symptoms persist, consult a physician.

Skin Effects: Nuisance dust. May cause irritation through mechanical abrasion. Wash skin thoroughly with soap and water.

Acute Oral Effects: None known.

Chronic Effects: None known.

Carcinogenicity: Neither this product nor any of its components are considered carcinogenic by OSHA, IARC, NTP, or ACGIH.

Section 12 - Ecological Information

No information available.

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

Zinc or Zinc compounds are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372.0

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

Canadian Domestic Substances List: Components of this product are listed on the Canadian DSL.

European Community: This substance or all of its components are listed on EINECS, the European Inventory of Existing Commercial Chemical Substances.

Australia: Components of this product are listed on AICS, the Australian Inventory of Chemical Substances.

China: Components of this product are listed on the Chinese Inventory.

Japan: Components of this product are listed on ENCS, the Japanese Existing and New Chemical Substances list.

Korea: Components of this product are listed on the ECL, the Korean Existing and Evaluated Chemical Substances list.

Philippines: Components of this product are listed on PICCS, the Philippines Inventory of Chemicals and Chemical Substances.

Swiss: Components of this product are listed on Giftliste, List of Toxic Substances.

WHMIS: Components of this product are listed as uncontrolled products by WHMIS.

Section 16 - Other Information

Prepared By: Stephanie Nichols

Revision Notes: 5/9/06

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

C-TEC LSZ4A	C-TEC LSZ4AF
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