

Safety Data Sheet

C-TEC ZST

MSDS No. 9710.7

Date of Preparation: 3/18/97

Revision: 4/1/15

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: C-TEC ZST

Synonyms: Zinc Stannate

General Use: Fire retardant.

Manufacturer: Marshall Additive Technologies

Division of the R. J. Marshall Company

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Date Revised: 4/1/15

Preparer: Stephanie Nichols

Section 2 - Hazards Identification

Classification of chemical: Not hazardous

Signal word: None

Symbol: None

Hazard Statements: None

Precautionary Statements: None

Hazards not otherwise classified: None

HMIS
H 1
F 0
R 0
PPE [†] E
[†] Sec. 8

Section 3 - Composition / Information on Ingredients

Ingredient Name	CAS Number	EINECS	Percent by Weight
Zinc Stannate	12036-37-2	405-290-6	Max 100.0

Section 4 - First Aid Measures

Description of first aid measures:

Inhalation: If symptoms such as nose or throat irritation are observed, remove person to fresh air. No specific treatment is necessary.

Skin: If irritation appears, wash with soap and abundant water for a couple of minutes.

Eye Contact: Use eye wash fountain or fresh water to clean the eyes. If irritation persists for more than 30 minutes, seek medical attention.

Ingestion: In case of accidental ingestion, maintain adequate kidney function and force fluid. Give two glasses of water or milk to drink and seek medical attention. Gastric lavage is recommended for symptomatic patients only. Hemodialysis should be reserved for massive acute ingestion or patients with renal failure.

Most important symptoms/effects, acute and delayed:

Inhalation: Accidental inhalation of dust at levels greater than 10 mg/m³ may cause light irritation to the respiratory system.

Skin: Drying of the skin can occur.

Eye contact: May cause eye irritation.

Ingestion: Small amounts (teaspoon) swallowed accidentally are not likely to cause effects. Swallowing larger amounts may cause gastrointestinal symptoms. Choking may occur if large amounts are swallowed.

Indication of immediate medical attention and special treatment needed, if necessary: No medical assistance is normally required.

Section 5 - Fire-Fighting Measures

Suitable Extinguishing Media: Any media may be used on fire. Use appropriate media for surrounding fire.

Unsuitable Extinguishing Media: None

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 facepiece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Wear safety glasses.

Methods and materials for containment and clean up: Sweep up dry powder and properly dispose. Wash the area with water taking care to not release the material to the environment or the drain.

Section 7 - Handling and Storage

Precautions for safe handling: Avoid generating dust during handling. Handle the product in a well-ventilated location. Rinse hands after handling and before eating, drinking, or smoking.

Storage Requirements: Store in dry, cool, well-ventilated area away from strong reducing agents. To avoid product damage: limit humidity, protect from light, keep at a temperature between 23°F (-5°C) and 104°F (40°C).

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:

Protective Clothing/Equipment: Wear suitable protective clothing, gloves, and eye/face protection.

Hand: Use suitable protective gloves made of butyl rubber, nitrile, or pvc.

Eye: Wear safety glasses for long exposures and high concentration levels.

Skin: Wear conventional work clothes.

Respiratory: Wear approved dust mask for long exposures and high concentration levels.

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.

Ingredient	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Inorganic Tin Compounds	2 mg/m ³	none estab.	2 mg/m ³	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 28.17.

Section 9 - Physical and Chemical Properties

Appearance: white powder

Odor: Odorless

Odor Threshold: not applicable

pH: 7 @ 68°F (20°C) (20% aqueous solution)

Freezing/Melting Point: not applicable

Boiling Point: not applicable

Flash Point: not applicable

Flash Point Method: not applicable

Evaporation Rate: not applicable

Flammability: Non-flammable, non-combustible.

Upper/lower flammability or explosive limits: not applicable

Vapor Pressure: negligible @ 68°F (20°C)

Vapor Density (Air=1): not applicable

Relative Density: n/a

Specific Gravity (H₂O=1, at 4 °C): 3.9

Water Solubility: 0.003% @ 68°F (20°C)

Other Solubilities: Soluble in strong acids and bases.

Partition coefficient: n-octanol/water; not determined

Auto-ignition Temperature: Not determined.

Decomposition temperature: not determined

Viscosity: not applicable

Section 10 - Stability and Reactivity

Reactivity: None known

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

Possibility of hazardous reactions: None known.

Conditions to Avoid: High temperatures and direct contact with fire or heat sources.

Incompatible materials: None known.

Hazardous Decomposition Products: None

Section 11- Toxicological Information

Information on the likely routes of exposure:

Ingestion: Low acute oral toxicity. LD₅₀ rats >5000 mg/kg bw. No specific health warnings noted.

Inhalation: Low acute inhalation toxicity; LC₅₀ rats >4.35 mg/l/4hr.

Skin: Low acute dermal toxicity; LD₅₀ rats >2466 mg/kg bw. No specific health warnings noted.

Eye: No data available.

Symptoms related to the physical, chemical, and toxicological characteristics:

Ingestion: Ingestion unlikely. Large quantities swallowed could cause choking.

Inhalation: Dust may irritate respiratory system or lungs.

Skin: Frequent or prolonged contact may cause mild skin discomfort.

Eye: Particles in the eyes may cause irritation and redness.

Delayed and immediate effects and also chronic effects from short- and long-term exposure: None known.

Carcinogenicity: This product is not considered carcinogenic by OSHA, IARC, NTP, and ACGIH.

Mutagenicity: No evidence found

Reproductive toxicity: No evidence found

Chronic toxicity: No evidence found

Section 12 - Ecological Information

Ecotoxicity:

Fish- LC50 (96 hrs.) : >3.3 rainbow trout

Daphnia: EC₅₀ (48 hrs.) : >3.3 mg/l

Persistence and degradability: Not applicable-Inorganic chemical

Bioaccumulative potential: Not applicable-Inorganic chemical

Mobility in soil: expected to be immobile in soil due to its low solubility

PBT/vPvB Evaluation: Not applicable-Inorganic chemical

Other adverse effects: not regarded as dangerous for the environment.

Water hazard classification: no data available

Section 13 - Disposal Considerations

Disposal: Recycle if possible or landfill. Do not disperse in city drain or water course. Contaminated packaging must be completely emptied, segregated, and disposed of as general waste.

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.

UN number: not classified

UN proper shipping name: not classified

Transport hazard classes: not classified

Packing group: not classified

Environmental hazards: not classified

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): not classified

Special precautions: None

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.

Subject to consent order under Section 5(e)

Commenced PMN

Proposed or Final Significant New Use Rule

OSHA Regulations:

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

TSCA & INTERNATIONAL REGULATIONS

TSCA- Listed	CANADA- Listed NDSL	EUROPE-Listed on EINECS: EC# 601-699-0	KOREA-Listed ON ECL: Serial # 2001-3-1822	ASIA-PAC- Listed
New Zealand- Listed on NZIoC	China- Listed	Japan- Listed on ENCS	Taiwan- Listed	Philippines- Not Listed
Australia- Not Listed				

Section 16 - Other Information**Prepared By:** Stephanie Nichols**Revision Notes:** 4/1/15**Product Grades Available from the R. J. Marshall Company** (this list may be incomplete):

C-TEC ZST

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