



NFPA 	HCS Risk Phrases HCS CLASS: Irritating substance	Protective Clothing 
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Section I. Chemical Product and Company Identification

Common Name/ Trade Name	CITRIC ACID	Revision Date: 7-6-05
Supplier	FRITZ INDUSTRIES, INC. 500 SAM HOUSTON ROAD MESQUITE, TX 75149 (972) 285-5471 (800) 955-1323	In Case of Emergency. (800) 424-9300 Week Days: (972) 285-5471 (800) 955-1323
Chemical Family		
Material Uses		

Section II. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC ₅₀ /LD ₅₀
Citric Acid, anhydrous	77-92-9	> 99.5	OSHA PEL 5mg/mf (respirable dust)	LD ₅₀ =5.04 g/kg (oral, mouse) LD ₅₀ =3 g/kg (oral, rat)

Section III. Hazards Identification

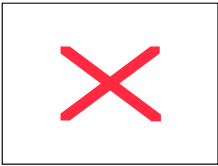
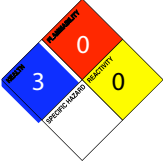
Emergency overview	Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed
Eye contact	Irritant. May cause redness, pain, possible eye burns, conjunctivitis, ulceration and permanent cloudiness. Rinse eyes with water for at least 15 minutes. Seek medical attention if irritation persists.
Skin	May cause irritation with discomfort, local redness and possible swelling. Repeated or prolonged contact may irritate the skin or cause dermatitis. Remove contaminated clothing, rinse affected area for at least 15 minutes. Seek medical attention if irritation persists.
Inhalation	Irritates, may burn. May cause mucous membrane irritation with sore throat, coughing and shortness of breath. Remove patient to fresh air and keep warm. If not breathing, give artificial respiration. Seek medical attention.
Ingestion	Treatment not normally required. If large amounts are ingested may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Do not induce vomiting. Seek medical attention.
Chronic exposure	NO INFORMATION FOUND.

Section IV. First Aid Measures

Eye Contact	Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid.
Skin Contact	Wash exposed area with soap and water. If irritation persists, seek medical attention.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen
Ingestion	If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

Section V. Fire and Explosion Data

Flammability of the Product	THIS MATERIAL IS NOT CONSIDERED FLAMMABLE.
Explosion Hazards in Presence of Various Substances	None Known
Fire Fighting Media and Instructions	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

Section VI. Accidental Release Measures			
Leak/Spill	Sweep up and place in suitable (fiberboard) containers for reclamation or later disposal.		
Disposal	RECYCLE OR DISPOSE IN LOCAL LAND FILL PER LOCAL, STATE, AND FEDERAL REGULATIONS.		
Section VII. Handling and Storage			
Handling	WASH THOROUGHLY AFTER HANDLING. USE WITH ADEQUATE ENTILATION. MINIMIZE DUST GENERATION AND ACCUMULATION. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. KEEP CONTAINER TIGHTLY CLOSED. AVOID INGESTION AND INHALATION.		
Storage	Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.		
Section VIII. Exposure Controls/Personal Protection			
Engineering Controls	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.		
Personal Protection	Wear protective eyeglasses or chemical safety goggles as described by OSHA'S Eye and Face Protection Regulations in 29 CFR 1910.133 or European Standard EN166. Wear appropriate protective gloves to prevent skin irritation. Wear appropriate protective clothing to prevent skin irritation.		
Personal Protection in Case of a Large Spill	Respirators: A respiratory protection program that meets OSHA'S 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.		
Section IX. Physical and Chemical Properties			
Physical state and Appearance	Solid granules	odor:	Odorless
		color:	white
Specific Gravity	1.665 @ 20 °C		
pH	1.7 (10%)		
Solubility	162 grams per 100 mls @ 25 °C water		
Section X. Stability and Reactivity Data			
Stability	stable		
Incompatibility with various substances	Alkalis and alkali carbonates, oxidizing agents		
Special Remarks for Reactivity	Material can react violently with strong oxidizing agents, metals, strong bases, and amines.		
Section XI. Toxicological Information			
Primary Routes of Exposure	Eye and skin contact; inhalation of dust; ingestion.		
Toxic Effects on Humans	Acute: Irritation possible to skin, eyes, lungs, and mucous membranes. Chronic: None known. Conditions aggravated/target organs. Persons with pre-existing conditions may be more susceptible.		
Special Remarks on other Toxic Effects on Humans	None		
Section XIV. Transport Information			
DOT Classification	Not regulated under the Transport of Dangerous Goods Act.		
Section XV. Other Regulatory Information and Pictograms			
Other Classifications	WHMIS (Canada) Canadian DSL Inventory Status	Class E All components of this product are either on the Domestic Substances List or the Non-Domestic Substances List or Exempt.	
HMIS (U.S.A.)		National Fire Protection Association (U.S.A.)	Health  Fire Hazard Reactivity Specific Hazard
Section XVI. Other Information			
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