


Safety Data Sheet

Section 1. Identification		
Product Identifier	Citric Acid	Version: 5 Effective Date: 10 February, 2016
Other Means Of Identification	None	
Initial Supplier Identifier	Chemfax Products Ltd. 11444 – 42 Street SE Calgary, AB T2C 5C4 Tel: 403-287-2055	
Recommended Use and Restrictions On Use	Descaler food additive	
Product Family	Organic acids	
24 Hour Emergency	Canutec (613) 996-6666	

Section 2. Hazard Identification	
Hazard Classification	
	
Health Hazards	Eye Damage/Irritation – Category 2A
Signal Word	Warning
Hazard Statement	Causes serious eye irritation.
Precautionary Prevention Statement	Wash hands thoroughly after handling. Wear eye and face protection.
Precautionary Response Statement	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Precautionary Storage Statement	No statement
Precautionary Disposal Statement	Dispose of contents/container in accordance with local regulations.
Other Hazards	None.



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Section 3. Composition / Information on Ingredients			
Chemical Name	Common Name or Synonyms	CAS# NO. and Other Unique Identifiers	% by weight
Citric acid	None	77-92-9	100

Section 4. First-Aid Measures	
Eye Contact	Flush eyes with water for 15 minutes. Seek medical attention.
Skin Contact	Flush area with water. If irritation persists seek medical attention. Launder clothing before reuse.
Inhalation	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Ingestion	Remove victim to fresh air. If there is difficulty breathing, seek immediate medical attention.
Most Important Symptoms and Effects Both Acute and Delayed	Irritation, nausea, headache, shortness of breath
Immediate Medical Attention and Special Treatment	Treat symptomatically. Treatment should be based on sound judgment of the physician and reactions of the patient. Observe for pulmonary oedema.

Section 5. Fire-Fighting Measures	
Suitable and Unsuitable Extinguishing Media	Use extinguishing media suitable for surrounding fire.
Hazardous Combustion Products	Carbon monoxide, carbon dioxide.
Specific Hazards Arising From the Product	Thermal decomposition can lead to release of irritating gases and vapours.
Special Protective Equipment and Precautions For Fire-Fighters	Fire-fighters should wear self contained breathing apparatus and full protective clothing. Use water spray to cool containers and structures exposed to fire.

Section 6. Accidental Release Measures	
Personal Precautions, Protective Equipment and Emergency Procedures	Chemical resistant gloves (neoprene) and coveralls (rubber). Isolate area. Pick up and arrange disposal without creating dust.

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Environmental Precautions	Do not allow to enter the storm water systems or surface drains. Dyke and contain.
Methods and Materials For Containment and Clean-Up	Restrict access to the area. Scoop up or vacuum up material and place in an appropriate container for reuse or disposal. Wash area down with water. Do not sweep material as this will generate dust.

Section 7. Handling and Storage	
Precautions For Safe Handling	Handle with care. Avoid breathing dust. Avoid air conveying of powdered product due to potential for static buildup. Avoid contact with skin and eyes. Wash thoroughly after handling.
Conditions For Safe Storage	Store in a cool dry place. Keep containers closed when not in use. Avoid incompatible materials.

Section 8. Exposure Controls / Personal Protection				
Control Parameters	TWA: 8 Hr	STEL: 15 min	Ceiling	IDLH *
Citric acid	Not established			
* Immediately Dangerous to Life and Health				
Exposure Controls	Local exhaust ventilation			
Appropriate Engineering Controls	Ensure safety shower and eye wash station are available.			
Individual Protective Measures				
Eye / Face Protection	Safety glasses			
Skin Protection	Chemical resistant coveralls and gloves			
Respiratory Protection	Dust mask or respirator if dust is being generated.			

Section 9. Physical and Chemical Properties	
Appearance	White powder or fine granules
Odour	Odourless
Odour Threshold	Not available.
pH	2.2 (1 % solution), 1.7 (10% solution)
Flash Point	Not applicable
Boiling Point and Boiling Range	175 °C
Melting Point and Freezing Point	Not applicable
Evaporation Rate	Not applicable
Flammability (solid, gas)	Flammable



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Upper and Lower Flammability or Explosive Limits	No data
Vapour Pressure	Not applicable
Vapour Density	Not applicable
Relative Density	1.665
Solubility	Soluble
Partition co-efficient, n-Octanol/Water	No data
Auto-ignition Temperature	Not applicable
Decomposition Temperature	No data
Viscosity	Not applicable

Section 10. Stability and Reactivity	
Reactivity	Stable
Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur
Conditions to Avoid	Avoid generating dust.
Incompatible Materials	Strong oxidising agents. Strong alkalis.
Hazardous Decomposition Products	Not expected to decompose under normal conditions of use and storage.

Section 11. Toxicological Information			
Component Toxicity	LD50 Oral	LD50 Dermal	LC50 Inhalation
Citric Acid	11.7g/kg (Rat)	>2.0 g/kg (bw Rat)	
Likely Routes of Exposure			
Skin:	Mild irritant. May cause localized irritation. Long term exposure may cause dermatitis.		
Eyes:	May cause redness, pain and conjunctivitis, ulceration and permanent cloudiness.		
Inhalation:	Dust may cause irritation of the mucous membranes, coughing and shortness of breath.		
Ingestion:	May cause gastrointestinal disturbances, nausea and vomiting if large quantities are ingested.		
Acute Toxicity Estimates (ATE)	Product is not toxic by any route of exposure		
STOT (Specific Target Organ Toxicity) – Single Exposure	Not classified		



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Aspiration Toxicity	Not classified
STOT (Specific Target Organ Toxicity) – Repeated Exposure	Not classified
Skin Corrosion / Irritation	Not hazardous
Serious Eye Damage / Irritation	Irritating
Respiratory or Skin Sensitization	Not classified
Carcinogenicity	Not listed.
Reproductive Toxicity	
- Sexual Function and Fertility	Not classified
- Development of Offspring	Not classified
- Effects on or via Lactation	Not classified
Germ Cell Mutagenicity	Not classified
Interactive Effects	Not classified
Other Information	None known

Section 12. Ecological Information

Ecotoxicity	LC50 / 96 hrs/ goldfish: 440-706 mg/l BOD: 528 O ₂ /g (5 days), COD: 728 mg O ₂ /g
Persistence and Degradability	Will not persist
Bioaccumulative Potential	Will not bioaccumulate
Biodegradability	Readily biodegradable
Mobility in Soil	Not available
Other Adverse Effects	None known

Section 13. Disposal Considerations

Disposal Considerations	Dispose of contents / container in accordance with local regulations.
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Section 14. Transport Information	
UN Number	Not applicable
UN Proper Shipping Name	Not applicable
Transport Hazard Class(es)	Not applicable
Packaging Group	Not applicable
Environmental Hazards	Not applicable
Bulk Transport	Not applicable
Special Precaution	Not applicable
DOT Erg#	Not applicable

Section 15. Regulatory Information	
Canada – DSL Inventory	All components of this product are either on the Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL) or exempt
TSCA	All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt
Additional Information	None

Section 16. Other Information	
NFPA Rating	Health-1/ Flammability-0/Reactivity-0/Special Hazard-Not applicable
HMIS Rating	Health-1/Flammability-0/Reactivity-0/Personal Protection-See Section 8.
Prepared by:	Chemfax Products Ltd., Technical Department
Date Prepared:	22 September, 2011
Date of Latest Revision:	10 February, 2016
Disclaimer	
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