



Mettler Electronics Corp.

## Cavi-Clean Additive Safety Data Sheet

### Section 1: Identification

Product Name: Cavi-Clean Additive  
 Revision Date: 09/03/2024  
 Version#: A  
 CAS#: 77-92-9, citric acid/ 99.5-100.5%  
 Reorder#: 1816  
 Product Use: Additive to Cavi-Clean Detergent for Ultrasonic Cleaning  
 Distributed by: Mettler Electronics Corp.  
 Address: 1333 South Claudina Street  
 City, State, Zip: Anaheim, CA 92805  
 Telephone: 1-800-854-9305, 1-714-533-2221  
 Emergency: Chemtrec 1-800-424-0300  
 Date Prepared: 09/01/2024

### Section 2: Hazard(s) Identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

Signal Word

Warning



#### Hazard Statements

May form combustible dust concentrations in air Causes serious eye irritation

May cause respiratory irritation

#### Precautionary Statements Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear eye/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

#### Eyes

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 advice/attention

#### Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

**Section 3: Composition/Information on Ingredients**

Component	CAS No	Weight %
Citric acid	77-92-9	>95

**Section 4: First-Aid Measures**

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

**Most important symptoms and effects**

**None reasonably foreseeable.**

**Notes to Physician** Treat symptomatically

**Section 5: Fire-Fighting Measures**

**Suitable Extinguishing Media** Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** 100 °C / 212 °F

**Method -** No information available

**Autoignition Temperature** 1000 °C / 1832 °F

**Explosion Limits**

**Upper** No data available

**Lower** No data available

**Oxidizing Properties** Not oxidizing

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**

Dust can form an explosive mixture with air. Keep product and empty container away from heat and sources of ignition. Fine dust dispersed in air may ignite.

**Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<b>NFPA</b>			
<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
2	1	0	N/A
<b>Section 6: Accidental Release Measures</b>			
<b>Personal Precautions</b> Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.			
<b>Environmental Precautions</b> Should not be released into the environment.			
<b>Methods for Containment and Clean</b> Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed-up containers for disposal.			
<b>Section 7: Handling and Storage</b>			
<b>Handling</b>	Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.		
<b>Storage.</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.		
<b>Incompatible Materials.</b>	Strong oxidizing agents. Strong bases.		
<b>Section 8: Exposure Controls/Personal Protection</b>			
<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.		
<b>Engineering Measures</b>	Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.		
<b>Personal Protective Equipment</b>			
<b>Eye/face Protection</b>	Wear appropriate 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.		
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.		
<b>Respiratory Protection</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.		
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.		
<b>Section 9: Physical and Chemical Properties</b>			
<b>Physical State</b>	Solid		
<b>Appearance</b>	White		
<b>Odor</b>	Odorless		
<b>Odor Threshold</b>	No information available		
<b>pH</b>	1.7 (10 %)		
<b>Melting Point/Range</b>	153 °C / 307.4 °F		

**Boiling Point/Range** No information available  
**Flash Point** 100 °C / 212 °F  
**Evaporation Rate** Not applicable  
**Flammability (solid, gas)** No information available  
**Flammability or explosive limits**  
**Upper** No data available  
**Lower** No data available  
**Vapor Pressure** No information available  
**Vapor Density** Not applicable  
**Specific Gravity** No information available  
**Solubility** Soluble in water  
**Partition coefficient; n-octanol/water** No data available  
**Autoignition Temperature** 1000 °C / 1832 °F  
**Decomposition Temperature** No information available  
**Viscosity** Not applicable  
**Molecular Formula** C<sub>6</sub> H<sub>8</sub> O<sub>7</sub>  
**Molecular Weight** 192.13

### Section 10: Stability and Reactivity

**Reactive Hazard** None known, based on information available  
**Stability** Stable under normal conditions.  
**Conditions to Avoid** Avoid dust formation. Incompatible products. Excess heat. Temperatures above 170°C.  
**Incompatible Materials** Strong oxidizing agents, Strong bases, Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>) Hazardous  
**Polymerization** Hazardous polymerization does not occur.  
**Hazardous Reactions** None under normal processing.

### Section 11: Toxicological Information

#### Acute Toxicity

#### Product Information Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Citric acid	LD50 = 3 g/kg ( Rat )	>2 g/kg ( Rat )	Not listed

#### Toxicologically Synergistic Products

No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Irritation** Severe eye irritant

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Citric acid	77-92-9	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available

<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	Respiratory system
<b>STOT - repeated exposure</b>	None known
<b>Aspiration hazard</b>	No information available
<b>Symptoms / effects, both acute and delayed</b>	No information available
<b>Endocrine Disruptor Information</b>	No information available
<b>Other Adverse Effects</b>	The toxicological properties have not been fully investigated.

### Section 12: Ecological Information

#### Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Citric acid	Not listed	Leuciscus idus: LC50 = 440-760 mg/L/96h	Photobacterium phosphoreum: EC50 = 14 mg/L/15 min	EC50 = 120 mg/L/72h

**Persistence and Degradability** Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility.** Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Citric acid	-1.72

### Section 13: Disposal Considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### Section 14: Transport Information

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

### Section 15: Regulatory Information

#### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA – EPA Regulatory Flags
Citric acid	77-92-9	X	ACTIVE	-

#### Legend:

**TSCA US EPA (TSCA)** - Toxic Substances Control Act, (40 CFR Part 710)

**X** - Listed

**'-'** - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section****6(h) (PBT)** Not applicable**TSCA 12(b) - Notices of Export** Not applicable**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL)

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Citric acid	77-92-9	X	-	201-069-1	X	X	X	X	X	KE-20831

**KECL - NIER number or KE number** (<http://ncis.nier.gov.kr/en/main.do>)**U.S. Federal Regulations****SARA 313** Not applicable**SARA 311/312 Hazard Categories** See section 2 for more information**CWA (Clean Water Act)** Not applicable**Clean Air Act** Not applicable**OSHA - Occupational Safety and Health Administration** Not applicable**CERCLA** Not applicable**California Proposition 65** This product does not contain any Proposition 65 chemicals.**U.S. State Right-to-Know Regulations** Not applicable**U.S. Department of Transportation****Reportable Quantity (RQ):** N**DOT Marine Pollutant** N**DOT Severe Marine Pollutant** N**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations****Mexico - Grade** Slight risk, Grade 1**Authorisation/Restrictions according to EU REACH**

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Citric acid	77-92-9	-	Use restricted. See item 75. (see link for restriction details)	-

<https://echa.europa.eu/substances-restricted-under-reach>**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Citric acid	77-92-9	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Citric acid	77-92-9	Not applicable	Not applicable	Not applicable	Annex I - Y34

**Section 16: Other Information**

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

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