

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision date 10-Aug-2023

Revision Number 1

1. Identification			
Product identifier			
Product Name	Citric Acid Monohydrate 20% (w/w)		
Other means of identification			
Product Code(s)	1511		
Synonyms	No information available		
Recommended use of the chemic	cal and restrictions on use		
Recommended use	Industrial use Laboratory use Industrial Manufacturing (all)		
Restrictions on use	No information available		
Details of the supplier of the safe	ty data sheet		
Supplier Address Columbus Chemical Industries, Inc. N4335 Temkin Rd. Columbus, WI 53925 USA Phone: (920) 623-2140 Fax: (920) 623-2577 www.columbuschemical.com			
Emergency telephone number			
24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 for US / 703-527-3887 outside US			
Emergency Telephone	911		
2. Hazard(s) identification			
<u>Classification</u> This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).			
Hazards not otherwise classified (HNOC) Not applicable			
Label elements			

Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical name	CAS No	Weight-%	Formula	Molecular Weight
Water	7732-18-5	Balance	H ₂ O	18.00 g/mol
Citric acid monohydrate	5949-29-1	19-21	$C_6H_8O_7H_2O$	210.14 g/mol

4. First-aid measures

Description of first aid measures

Inhalation	Remove to fresh air.	
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash skin with soap and water.	
Ingestion	Rinse mouth.	
Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically.	

5. Fire-fighting measures

Suitable Extinguishing Media Large Fire	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Explosion data	

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear protective nitrile rubber gloves. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	Odorless
Odor threshold	No information available

Property	Values	Remarks • Method
pH	No data available	No data available
pH (as aqueous solution)	No data available	No data available
Melting point / freezing point	No data available	No data available
Initial boiling point and boiling	No data available	No data available
range		
Flash point	No data available	No data available
Evaporation rate	No data available	No data available
Flammability	No data available	No data available
Flammability Limit in Air		
Upper flammability or explosive	No data available	No data available
limits		
Lower flammability or explosive	No data available	No data available
limits		
Vapor pressure	No data available	No data available
Relative vapor density	No data available	No data available
Relative density	1.075 - 1.085	
Water solubility	Soluble in water	
Solubility(ies)	No data available	No data available
Partition coefficient	No data available	No data available
Autoignition temperature	No data available	No data available
Decomposition temperature		
Kinematic viscosity	No data available	No data available
Dynamic viscosity	No data available	No data available
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight		
VOC content	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure				
Inhalation	Specific test data for the substance or mixture is not available.			
Eye contact	ye contact Specific test data for the substance or mixture is not available.			
Skin contact	Specific test data for the s	ubstance or mixture is not availal	ble.	
Ingestion	Specific test data for the s	ubstance or mixture is not availal	ble.	
Symptoms related to the physi	cal, chemical and toxicologica	I characteristics		
Symptoms	No information available.			
Acute toxicity				
Numerical measures of toxicity	,			
The following values are calculated based on chapter 3.1 of the GHS documentATEmix (oral)99,999.00mg/kgATEmix (dermal)99,999.00mg/kgATEmix (inhalation-gas)99,999.00ppmATEmix (inhalation-vapor)99,999.00mg/lATEmix (inhalation-dust/mist)99,999.00mg/l				
Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	
Water	>90 mL/kg (Rat)	-	-	
Delayed and immediate effects as well as chronic effects from short and long-term exposure Skin corrosion/irritation No information available.				
Serious eye damage/eye irritat	on No information available.			
Respiratory or skin sensitizatio	on No information available.			
	.			

- Germ cell mutagenicity No information available.
- Carcinogenicity No information available.
- Reproductive toxicity No information available.
- STOT single exposure No information available.

STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

•	12.	Eco	logical	information
н			.og.ou.	

Ecotoxicity	The environmental impact of this product has not been fully investigated.
Persistence and degradability	No information available.
Bioaccumulation	There is no data for this product.
Other adverse effects	No information available.

13. Disposal considerations

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers. Dispose of contents/containers in accordance with local regulations.

14. Transport information

DOT DOT Marine Pollutant	Not regulated No
TDG	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated

15. Regulatory information

International Inventories	
TSCA	Complies.
DSL/NDSL	Complies.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.

PICCS	Contact supplier for inventory compliance status.
AIIC	Contact supplier for inventory compliance status.
NZIOC	Contact supplier for inventory compliance status.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water	-	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards HMIS Health hazards		Flammability Flammability		Instability 0 Physical hazards 0	Special hazards - Personal protection X
--	--	------------------------------	--	-------------------------------------	--

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend	egend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION			
TWA	TWA (time-weighted average)	STEL	STEL (S	
Ceiling	Maximum limit value	*	Skin des	

STEL (Short Term Exposure Limit) Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date Revision Note 10-Aug-2023 No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet