

SAFETY DATA SHEET

Issue Date 03-Jan-2020

Revision Date 26-Jan-2024

024

Version 3

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1. IDENTIFICATION

<u>Product identifier</u> Product Name	Buffer Powder Pillows pH 10.01 ± 0.02 @ 25°C	
Other means of identification Product Code(s)	2227164	
Safety data sheet number	M00113	
Recommended use of the chemical and restrictions on use		

 Recommended use of the chemical and restrictions on use

 Recommended Use
 Buffer.

 Uses advised against
 None.

 Restrictions on use
 None.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

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

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2A

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word Warning



Hazard statements

EN / AGHS

H319 - Causes serious eye irritation H332 - Harmful if inhaled

Precautionary statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P312 - Call a POISON CENTER or doctor/physician if you feel unwell
P280 - Wear protective gloves, protective clothing, eye protection, and face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical attention

Other Hazards Known

May be harmful if swallowed May be harmful in contact with skin Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

<u>Mixture</u>

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Disodium carbonate	497-19-8	50 - 60%	-
Cuprate(2-),	1330-38-7	1 - 5%	-
[29H,31H-phthalocyanine-C,C-disulfonato(4-)-N29,N30,N31,N32]-, disodium			

4. FIRST AID MEASURES

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.		
Inhalation	Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. If symptoms persist, call a physician.		
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.		
Skin contact	Wash skin with soap and water.		
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention.		
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.		
Most important symptoms and effects, both acute and delayed			
Symptoms	Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.		

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.

	5. FIRE-FIGHTING MEASURES	
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Unsuitable Extinguishing Media	Caution: Use of water spray when fighting fire may be inefficient.	
Specific hazards arising from the chemical	No information available.	
Hazardous combustion products	Sodium monoxide. Carbon monoxide, Carbon dioxide. Sulfur oxides.	
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	
	6. ACCIDENTAL RELEASE MEASURES	
U.S. Notice	Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.	
Personal precautions, protective ec	uipment and emergency procedures	
Personal precautions	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust.	
Other Information	Refer to protective measures listed in Sections 7 and 8.	
Environmental precautions		
Environmental precautions	See Section 12 for additional ecological information.	
Methods and material for containme	ent and cleaning up	
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.	
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	
Reference to other sections	See section 8 for more information. See section 13 for more information.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.
Flammability class	Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Cuprate(2-),	TWA: 1 mg/m ³ Cu dust and	NDF	IDLH: 100 mg/m ³ Cu dust and
[29H,31H-phthalocyanine-C,C-disulfon	mist		mist
ato(4-)-N29,N30,N31,N32]-, disodium			TWA: 1 mg/m ³ Cu dust and
CAS#: 1330-38-7			mist

Appropriate engineering controls **Engineering Controls** Showers Eyewash stations Ventilation systems. Individual protection measures, such as personal protective equipment **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. **Hand Protection** Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1:2016. Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields. Skin and body protection Wear suitable protective clothing. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do **General Hygiene Considerations** not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

Thermal hazards

9. PHYSICAL AND CHEMICAL PROPERTIES

None under normal processing.

Information on basic physical and chemical properties

Physical state Appearance Odor	powder Odorless	Solid		Color Odor threshold	light blue No data available
Property_			Values		Remarks • Method
Molecular weigh	t		No data availa	ble	

EN / AGHS

рН	10	1% @ 20°C
Melting point / freezing point	160 °C / 320 °F	
Initial boiling point and boiling range	No data available	
Evaporation rate	Not applicable	
Vapor pressure	Not applicable	
Relative vapor density	No data available	
Specific gravity - VALUE 1	2.35	
Partition coefficient	log K _{ow} ~ 0	
Soil Organic Carbon-Water Partition Coefficient	log K _{oc} ~ 0.01	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	Not applicable	
Kinematic viscosity	Not applicable	
<u>Solubility(ies)</u>		

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name	Solubility classification	<u>Solubility</u>	Solubility Temperature
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

Other information

Metal Corrosivity

Steel Corrosion Rate Aluminum Corrosion Rate

No data available No data available

Volatile Organic Compounds (VOC) Content Not applicable

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)	
Disodium carbonate	497-19-8	No data available	-	
Cuprate(2-),	1330-38-7	No data available	-	
[29H,31H-phthalocyanine-C,C-disulfon				
ato(4-)-N29,N30,N31,N32]-, disodium				

Explosive properties

Upper explosion limit	No data available
Lower explosion limit	No data available

Flammable properties

Flash point

Flammability Limit in Air Upper flammability limit: Lower flammability limit:

Oxidizing properties

Bulk density

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Not applicable

No data available No data available

No data available.

No data available

10. STABILITY AND REACTIVITY

Reactivity Not applicable.

<u>Chemical stability</u> Stable under normal conditions.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Possibility of hazardous reactions None under normal processing.

<u>Hazardous polymerization</u> None under normal processing.

Conditions to avoid Excessive heat.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

Heating to decomposition releases toxic fumes of carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

May cause irritation of respiratory tract. Harmful by inhalation.
Causes serious eye irritation. May cause redness, itching, and pain.
May cause irritation. Prolonged contact may cause redness and irritation.
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

No data available.

Ingredient Acute Toxicity Data

No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Disodium carbonate (50 - 60%) CAS#: 497-19-8	Rat LD50	4090 mg/kg	None reported	None reported	IUCLID
Cuprate(2-), [29H,31H-phthalocya nine-C,C-disulfonato(4-)-N29,N30,N31,N3 2]-, disodium (1 - 5%) CAS#: 1330-38-7	Rat LD₅₀	> 5000 mg/kg	None reported	None reported	Vendor SDS
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Disodium carbonate (50 - 60%) CAS#: 497-19-8	Mouse LD50	2210 mg/kg	None reported	None reported	No information available
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Disodium carbonate (50 - 60%) CAS#: 497-19-8	Rat LC50	1.15 mg/L	4 hours	None reported	IUCLID

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	4,154.00 mg/kg
ATEmix (dermal)	4,001.00 mg/kg
ATEmix (inhalation-dust/mist)	2.08 mg/l
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Skin Corrosion/Irritation Data

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Disodium carbonate (50 - 60%) CAS#: 497-19-8	Standard Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	ECHA HSDB

Serious eye damage/irritation

Classification based on data available for ingredients. Irritating to eyes.

Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Disodium carbonate (50 - 60%) CAS#: 497-19-8	Standard Draize Test	Rabbit	100 mg	24 hours	Eye irritant	HSDB

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Sensitization Data

No data available.

STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data No data available.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Disodium carbonate	497-19-8	-	-	-	-
Cuprate(2-), [29H,31H-phthalocyanine- C,C-disulfonato(4-)-N29,N 30,N31,N32]-, disodium	1330-38-7	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

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Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro Data No data available.

Substance invitro Data No data available.

Mixture invivo Data No data available.

Substance invivo Data No data available.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Aspiration hazard

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Based on available data, the classification criteria are not met.
Unknown aquatic toxicity	0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

<u>Mixture</u>

Aquatic Acute Toxicity No data available.

Aquatic Chronic Toxicity No data available.

Substance

Aquatic Acute Toxicity No data available.

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data	
Disodium carbonate (50 - 60%) CAS#: 497-19-8	96 hours	Lepomis macrochirus	LC ₅₀	300 mg/L	IUCLID	
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data	
Disodium carbonate (50 - 60%) CAS#: 497-19-8	48 Hours	Daphnia magna	EC ₅₀	265 mg/L	IUCLID	
Cuprate(2-), [29H,31H-phthalocya nine-C,C-disulfonato(4-)-N29,N30,N31,N3	48 Hours	Daphnia pulex	LC ₅₀	100 mg/L	ECOSARS	

2]-, disodium (1 - 5%) CAS#: 1330-38-7						
Aquatic Chronic Tox	icity					
No data available.	2					
Persistence and deg	<u>radability</u>					
Mixture No data available.						
<u>Bioaccumulation</u> MATERIAL DOES NO Mixture No data available.	T BIOACCUM	ULATE				
Partition coefficient			log	Kow ~ 0		
<u>Mobility</u>						
Soil Organic Carbon-	Water Partitio	on Coefficient	log	K _{oc} ~ 0.01		
Other adverse effects No information availab	-					

13. DISPOSAL CONSIDERATIONS

	Waste	treatment	methods	
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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.
Special instructions for disposal	Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an acid, such as sulfuric or citric. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

14. TRANSPORT INFORMATION		
DOT	Not regulated	
TDG	Not regulated	
IATA	Not regulated	
IMDG	Not regulated	
Note:	No special precautions necessary.	

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories TSCA DSL/NDSL

Complies Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Complies

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

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Cuprate(2-),	1.0
[29H,31H-phthalocyanine-C,C-disulfonato(4-)-N29,N30,N31,N32]	
-, disodium (CAS #: 1330-38-7)	

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Cuprate(2-), [29H,31H-phthalocyanine -C,C-disulfonato(4-)-N29, N30,N31,N32]-, disodium 1330-38-7		X	-	-

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

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Cuprate(2-),	Х	-	Х
[29H,31H-phthalocyanine-C,C-d			
isulfonato(4-)-N29,N30,N31,N32			
]-, disodium			
1330-38-7			

U.S. EPA Label Information

Chemical name	FIFRA	FDA
Disodium carbonate	180.1234	21 CFR 184.1742

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments
None

Additional information

Global Automotive Declarable Substance List (GADSL) Not applicable NFPA and HMIS Classifications

NFPA	Health hazards - 2	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 2	Flammability - 0	Physical hazards - 0	Personal protection - X - I

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

ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR	ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS	CCRIS (Chemical Carcinogenesis Research Information System)
CDC	CDC (Center for Disease Control)
CEPA	CEPA (Canadian Environmental Protection Agency)
CICAD	CICAD (Concise International Chemical Assessment Documents)
ECHA	ECHA (The European Chemicals Agency)
EEA	EEA (European Environment Agency)
EPA	EPA (Environmental Protection Agency)
ERMA	ERMA (New Zealands Environmental Risk Management Authority)
ECOSARS	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™
FDA	FDA (Food & Drug Administration)
GESTIS	GESTIS (Information System on Hazardous Substances of the German Social Accident
	Insurance)
HSDB	HSDB (Hazardous Substances Data Bank)
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INERIS IPCS INCHEM	INERIS (The National Industrial Environment and Risks Institute) IPCS INCHEM (International Programme on Chemical Safety)
IUCLID	IUCLID (The International Uniform Chemical Information Database)
NITE	Japan National Institute of Technology and Evaluation (NITE)
NIH	NIH (National Institutes of Health)
NIOSH	NIOSH (National Institute for Occupational Safety and Health)
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)
NDF	no data
NICNAS	Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH IDLH	Immediately Dangerous to Life or Health
OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEEN	PEEN (Pan European Ecological Network)
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS	SIDS (Screening Information Dataset) for High Volume Chemicals
SYKE	The Finnish Environment Institute (SYKE)
USDA	USDA (United States Department of Agriculture)
USDC	USDC (United States Department of Commerce)
WHO	WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)		STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration		Ceiling	Ceiling Limit Value
Х	Listed		Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN* RSP+ C M	Skin designation Respiratory sensitization Carcinogen mutagen		SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant
Prepared By		Hach Product Compliance Department		
Issue Date	Issue Date 03-Jan-20		Jan-2020	
Revision Date		26-Jan-2024		
Revision Note		None		

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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End of Safety Data Sheet