

SAFETY DATA SHEET

Issue Date 15-Apr-2021

Revision Date 10-Aug-2021 Version 5.2

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1. IDENTIFICATION

<u>Product identifier</u> Product Name	Chloride 2 Indicator Powder Pillows			
Other means of identification Product Code(s)	105766			
Safety data sheet number	M00022			
UN/ID no	UN3288			
Recommended use of the chemical and restrictions on use				
Recommended Use	Laboratory reagent. Determination of chloride.			
Uses advised against	Consumer use.			
Restrictions on use	For Laboratory Use Only.			

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 - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Chronic aquatic toxicity	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word Danger

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Hazard statements

- H302 Harmful if swallowed
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H330 Fatal if inhaled
- H335 May cause respiratory irritation
- H340 May cause genetic defects
- H350 May cause cancer
- H410 Very toxic to aquatic life with long lasting effects

Precautionary statements

- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P271 Use only outdoors or in a well-ventilated area
- P284 Wear respiratory protection
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P310 Immediately call a POISON CENTER or doctor/physician
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed
- P405 Store locked up
- P501 Dispose of contents/ container to an approved waste disposal plant
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P362 Take off contaminated clothing and wash before reuse
- 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
- P272 Contaminated work clothing should not be allowed out of the workplace
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention
- P363 Wash contaminated clothing before reuse
- P201 Obtain special instructions before use
- P308 + P313 IF exposed or concerned: Get medical advice/attention
- P273 Avoid release to the environment
- P391 Collect spillage
- P270 Do not eat, drink or smoke when using this product
- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

<u>Mixture</u>

Chemical Family Chemical nature Mixture. Mixture of inorganic compounds. Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Sodium bicarbonate	144-55-8	50 - 60%	-
Chromic acid (H2CrO4), dipotassium salt	7789-00-6	50 - 60%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice	IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.
Inhalation	If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur. Remove to fresh air.
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	May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.
Ingestion	Call a physician or poison control center immediately. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Avoid contact with skin, eyes or clothing.
Most important symptoms and effe	cts, both acute and delayed
Symptoms	Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives. Burning sensation.
Indication of any immediate medica	al attention and special treatment needed
Note to physicians	May cause sensitization in susceptible persons. 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	Product is or contains a sensitizer. May cause sensitization by skin contact.

Product Name Chloride 2 Indicator Powder Pillows Product Code(s) 105766 Issue Date 15-Apr-2021 Revision Date 10-Aug-2021 Version 5.2 Page 4/18 Hazardous combustion products This material will not burn. Firefighters should wear self-contained breathing apparatus and full firefighting turnout Special protective equipment for fire-fighters 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 equipment and emergency procedures Avoid generation of dust. Do not breathe dust. Keep people away from and upwind of Personal precautions spill/leak. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. **Other Information** Refer to protective measures listed in Sections 7 and 8. Environmental precautions **Environmental precautions** Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Methods and material for containment and cleaning up Methods for containment Prevent further leakage or spillage if safe to do so. Take up mechanically, placing in appropriate containers for disposal. Methods for cleaning up 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 Handle product only in closed system or provide appropriate exhaust ventilation. Take off Advice on safe handling

Advice on sare handling Handle product only in closed system or provide appropriate exhaust ventilation. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

 Storage Conditions
 Store locked up. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	
Chromic acid (H2CrO4), dipotassium	STEL: 0.0005 mg/m ³ Cr(VI)	TWA: 5 µg/m³	IDLH: 15 mg/m ³ Cr(VI)	
salt CAS#: 7789-00-6	inhalable particulate matter	(vacated) Ceiling: 0.1 mg/m ³	TWA: 0.0002 mg/m ³ Cr	
CAS#: 7789-00-6	TWA: 0.0002 mg/m ³ Cr(VI) inhalable particulate matter	Ceiling: 0.1 mg/m ³		
	S*			
	-			
Appropriate engineering controls				
Engineering Controls	Showers Eyewash stations			
	Ventilation systems.			
Individual protection measures, suc				
Respiratory protection		entrations above the exposure		
	vapors/dusts/aerosols.	s. Wear breathing apparatus if	exposed to	
Hand Protection		ble gloves. Gloves must be ins		
		e to satisfy the specifications of		
	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	Wear safety glasses with side	shields (or goggles). If splashe	s are likely to occur, wear	
	safety glasses with side-shields.			
Skin and body protection	Long sleeved clothing. Wear suitable protective clothing.			
Skin and body protection	Long sleeved clothing. Wear s			
General Hygiene Considerations	Do not breathe dust. Take off contaminated clothing and wash before reuse. Contaminated			
		owed out of the workplace. Rec		
		mmended. Wash hands before ntact with skin, eyes or clothing		
		t, drink or smoke when using th		
	-,			
_				
Environmental exposure controls		vised if significant spillages can ound or into any body of water.		
	anow into any sewer, on the gr	ound of into any body of water.		
Thermal hazards	None under normal processing].		

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Odor	powder Odorless	Solid Pow		Color Odor threshold	yellow No data avai	lable
Property_			Values			Remarks • Method
Molecular weight			No data availabl	e		
рН			8.2			5% Solution
Melting point/free	zing point		No data availabl	e		
Boiling point / boi	ling range		No data availabl	е		

Evaporation rate	Not applicable
Vapor pressure	Not applicable
Relative vapor density	No data available
Specific gravity (water = 1 / air = 1)	2.25
Partition Coefficient (n-octanol/water)	log K _{ow} ~ 0
Soil Organic Carbon-Water Partition Coefficient	log K _{oc} ~ 0
Autoignition temperature	No data available
Decomposition temperature	100 °C / 212 °F
Dynamic viscosity	Not applicable
Kinematic viscosity	Not applicable

Solubility(ies)

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)
Sodium bicarbonate	144-55-8	No data available	-
Chromic acid (H2CrO4), dipotassium salt	7789-00-6	Not applicable	-

Explosive properties	
Upper explosion limit Lower explosion limit	No data available No data available
Flammable properties	
Flash point	Not applicable
Flammability Limit in Air Upper flammability limit:	No data available

Lower flammability limit:

Oxidizing properties

Bulk density

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No	data	available	ł

No data available.

No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable. Corrosive to metal. Very reactive.

Chemical stability

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 acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Chromium trioxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Fatal if inhaled. May cause irritation of respiratory tract.
Eye contact	Irritating to eyes. Causes serious eye irritation.
Skin contact	May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Causes skin irritation.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed.
Symptoms	Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.
<u>Acute toxicity</u> Harmful if swallowed Fatal if inhaled	
Product Acute Toxicity Data	

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Test data reported below.

Oral Exposure Route

Endpoint type	Toxicological	Key literature references and sources for data
Rat	effects	Outside testing
LD50	Behavioral	
	Flaccid muscle	
	tone	
	Lethargy	
	Loss of righting	
	reflex	
	Prostration	
	Endocrine	
	Abnormalities of	
	the spleen	
	Eye	
	Ptosis	
	Gastrointestinal	
	Abnormalities of	
	the gastrointestinal	
	tract	
	Mucoid diarrhea	
	Liver	
	Abnormalities of	
	the liver	
	Lungs, Thorax,	
	or Respiration	
	Abnormalities of	
	the lungs	
	Dyspnea	
	Red or brown	
	staining of the	
	nose/mouth area	
	Tachypnea	
	Nutritional and	
	Gross Metabolic	
	Wetness of the	
	anogenital area	
	Reproductive	
	Skin and	
	Appendages	
	Piloerection	
	Wetness of the	
Inhalation (Gas) E	nose/mouth	

Inhalation (Gas) Exposure Route

Ingredient Acute Toxicity Data Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Rat LD₅₀	4220 mg/kg	None reported	None reported	Vendor SDS
Chromic acid (H2CrO4), dipotassium salt	Mouse LD50	180 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)

(50 - 60%)			
CAS#: 7789-00-6			

Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Rat LC₅₀	> 4.47 mg/L	4 hours	None reported	OECD 429: Skin Sensitization: Local Lymph Node Assay
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	LC₅₀ Rat	>= .06 mg/L	4 hours	Death	ECHA (The European Chemicals Agency)

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)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	0.120 mg/l
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

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

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Standard Draize Test	Human	30 mg	3 days	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	OECD Test 404: Acute Dermal Corrosion/Irritation	Rabbit	500 mg	4 hours	Skin irritant	ECHA (The European Chemicals Agency)

<u>Serious eye damage/irritation</u> Classification based on data available for ingredients. Irritating to eyes.

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

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Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Standard Draize Test	Rabbit	100 mg	0.5 minutes	Mild eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	None reported	None reported	None reported	None reported	Eye irritant	No information available

Respiratory or skin sensitization

May cause sensitization by skin contact.

Product Sensitization Data

No data available.

Ingredient Sensitization Data

Test data reported below.

Skin Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Based on human experience	Human	Not confirmed to be a skin sensitizer	No information available

Respiratory Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Based on human experience	Human	Not confirmed to be a respiratory sensitizer	No information available

STOT - single exposure

May cause respiratory irritation.

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

Ingredient Specific Target Organ Toxicity Single Exposure Data Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Infant TD⊾₀	1260 mg/kg	None reported	Kidney, Ureter, or Bladder Urine volume increased Lungs, Thorax, or Respiration Other changes	RTECS (Registry of Toxic Effects of Chemical Substances)

STOT - repeated exposure

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

Product Specific Target Organ Toxicity Repeat Dose Data

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Man TD∟₀	20 mg/kg	5 days	Gastrointestinal Nausea or vomiting Nutritional and Gross Metabolic Metabolic acidosis	RTECS (Registry of Toxic Effects of Chemical Substances)

Inhalation (Dust/Mist) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Rat TC⊾	77.2 mg/L	119 days	Blood Changes in serum composition (e.g. TP, bilirubin, cholesterol) Cardiac Other changes Nutritional and Gross Metabolic Changes in sodium	RTECS (Registry of Toxic Effects of Chemical Substances)

Carcinogenicity

Classification based on data available for ingredients. Contains a known or suspected carcinogen.

Product Carcinogenicity Data

No data available.

Ingredient Carcinogenicity Data

Test data reported below.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Sodium bicarbonate	144-55-8	-	-	-	-
Chromic acid (H2CrO4),	7789-00-6	A1	Group 1	Known	Х
dipotassium salt					

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	A1 - Known Human Carcinogen
IARC (International Agency for Research on Cancer)	Group 1 - Carcinogenic to Humans
NTP (National Toxicology Program)	Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of	X - Present
Labor)	

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	Mouse	1600 mg/kg	62 weeks	Blood Leukemia Lungs, Thorax, or Respiration	RTECS (Registry of Toxic Effects of Chemical Substances)

Germ cell mutagenicity

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

Product Germ Cell Mutagenicity invitro Data

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

Test data reported below.

Ch	nemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
dip	Chromic acid (H2CrO4), potassium salt (50 - 60%) AS#: 7789-00-6	Sister chromatid exchange	Human fibroblast	100 nmol/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

Product Germ Cell Mutagenicity invivo Data

No data available.

Ingredient Germ Cell Mutagenicity invivo Data

Test data reported below.

Oral Exposure Route

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Unscheduled DNA synthesis	Rat	50400 mg/kg	4 weeks	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

Reproductive toxicity

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

Product Reproductive Toxicity Data

No data available.

Ingredient Reproductive Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	Mouse	400 mg/kg	12 weeks	Pre-implantation mortality (e.g. reduction in number of implants per female; total number of implants per corpora lutea)	· · ·

Aspiration hazard

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

EN / AGHS

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Unknown aquatic toxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Product Ecological Data

Aquatic Acute Toxicity No data available.

Aquatic Chronic Toxicity No data available.

Ingredient Ecological Data

Aquatic Acute Toxicity Test data reported below.

Fish

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	96 hours	Lepomis macrochirus	LC ₅₀	7100 mg/L	PEEN (Pan European Ecological Network)
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	96 hours	Pimephales promelas	LC ₅₀	40 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)

Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	48 Hours	Daphnia magna	EC ₅₀	4100 mg/L	PEEN (Pan European Ecological Network)
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	48 Hours	Daphnia magna	EC ₅₀	15 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)

Algae

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Chromic acid (H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	72 Hours	Nitzschia sp.	EC50	0.26 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)

Aquatic Chronic Toxicity

Test data reported below.

Fish

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Chromic acid	21 days	Daphnia magna	NOEC	35 mg/L	ECHA (The European Chemicals

(H2CrO4), dipotassium salt (50 - 60%) CAS#: 7789-00-6	Agency)					
Persistence and degradability						
Product Biodegradability Data No data available.						
Bioaccumulation MATERIAL DOES NOT BIOACCUMULATE Product Bioaccumulation Data No data available.						
Partition Coefficient (n-octanol/water)	log Kow ~ 0					
Mobility						
Soil Organic Carbon-Water Partition Coefficient	log K _{oc} ~ 0					
Other adverse effects Environmental exposure						
13. DISPOSAL CONSIDERATIONS						
Waste treatment methods						

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.
US EPA Waste Number	No information available

Special instructions for disposal Dispose of material in an E.P.A. approved hazardous waste facility. Check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.

14. TRANSPORT INFORMATION

DOT UN/ID no Proper shipping name DOT Technical Name Transport hazard class(es) Packing Group Description Emergency Response Guide Number	UN3288 Toxic solid, inorganic, n.o.s. Chromic acid (H2CrO4), dipotassium salt 6.1 III UN3288, Toxic solid, inorganic, n.o.s. (Chromic acid (H2CrO4), dipotassium salt), 6.1, III 151
TDG	UN3288
UN/ID no	Toxic solid, inorganic, n.o.s.
Proper shipping name	Chromic acid (H2CrO4), dipotassium salt
TDG Technical Name	6.1
Transport hazard class(es)	III
Packing Group	Page 14/18

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Description	UN3288, Toxic solid, inorganic, n.o.s. (Chromic acid (H2CrO4), dipotassium salt), 6.1, III
ΙΑΤΑ	
UN number or ID number	UN3288
Proper shipping name	Toxic solid, inorganic, n.o.s.
IATA Technical Name	Chromic acid (H2CrO4), dipotassium salt
Transport hazard class(es)	6.1
Packing group	
ERG Code	6L
Special precautions for user	A3,A5
IMDG	
UN number or ID number	UN3288
Proper shipping name	Toxic solid, inorganic, n.o.s.
IMDG Technical Name	Chromic acid (H2CrO4), dipotassium salt
Transport hazard class(es)	6.1
Packing Group	
EmS-No	F-A, S-A
Special precautions for user	223, 274
Marine pollutant	This material meets the definition of a marine pollutant
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	Complies
DSL/NDSL	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 - Existing substances	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

EN / AGHS

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 %
Chromic acid (H2CrO4), dipotassium salt (CAS #: 7789-00-6)	0.1
SARA 311/312 Hazard Categories Acute health hazard	Yes
Chronic Health Hazard	Yes
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
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	10 lb	Х	-	Х

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

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Chromic acid (H2CrO4),	10 lb	-	RQ 10 lb final RQ
dipotassium salt			RQ 4.54 kg final RQ
7789-00-6			

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Chromic acid (H2CrO4), dipotassium salt (CAS #: 7789-00-6)	Carcinogen
	Developmental
	Female Reproductive
	Male Reproductive

WARNING: This product can expose you to chemicals including Chromic acid (H2CrO4), dipotassium salt, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to http://www.P65Warnings.ca.gov

IMERC: Not applicable

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
Chromic acid (H2CrO4),	X	X	Х
dipotassium salt			
7789-00-6			

U.S. EPA Label Information

Chemical name	FIFRA	FDA
Sodium bicarbonate	180.0910	21 CFR 184.1736

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

Special Comments

Additional information

Global Automotive Declarable Substance List (GADSL)

Chemical name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thersholds
Chromic acid (H2CrO4), dipotassium salt	Declarable Substance (LR)	3 mg/kg
7789-00-6	Prohibited Substance (LR)	0 %
		0.1 %

NFPA and HMIS Classifications

NFPA	Health hazards - 4	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - * - 4	Flammability - 0	Physical hazards - 0	Personal protection -
				- 1

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

NIOSH IDLHImmediately Dangerous to Life or HealthACGIHACGIH (American Conference of Governmental Industrial Hygienists)NDFno data

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

Product NameChloride 2 Indicator Powder PillowsRevision Date10-Aug-2021Page18 / 18

Issue Date	15-Apr-2021
Revision Date	10-Aug-2021
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