



Be Right™

# SAFETY DATA SHEET

Issue Date 15-Apr-2021

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Version 4.9

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## 1. IDENTIFICATION

### Product identifier

**Product Name** Chloride 2 Indicator

### Other means of identification

**Product Code(s)** 104399

**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



**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

**Mixture**

**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 (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt	7789-00-6	50 - 60%	-

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	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.
<b>Eye contact</b>	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.
<b>Skin contact</b>	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.
<b>Ingestion</b>	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.
<b>Self-protection of the first aider</b>	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 effects, both acute and delayed

<b>Symptoms</b>	Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes. Hives. Burning sensation.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	May cause sensitization in susceptible persons. Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable Extinguishing Media</b>	Caution: Use of water spray when fighting fire may be inefficient.
<b>Specific hazards arising from the chemical</b>	Product is or contains a sensitizer. May cause sensitization by skin contact.
<b>Hazardous combustion products</b>	This material will not burn.

**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 equipment and emergency procedures

**Personal precautions** Avoid generation of dust. Do not breathe dust. Keep people away from and upwind of 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.

**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 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 (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt CAS#: 7789-00-6	STEL: 0.0005 mg/m <sup>3</sup> Cr(VI) inhalable particulate matter TWA: 0.0002 mg/m <sup>3</sup> Cr(VI) inhalable particulate matter S*	TWA: 5 µg/m <sup>3</sup> (vacated) Ceiling: 0.1 mg/m <sup>3</sup> Ceiling: 0.1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup> Cr(VI) TWA: 0.0002 mg/m <sup>3</sup> Cr

**Appropriate engineering controls**

**Engineering Controls**

Showers  
 Eyewash stations  
 Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Respiratory protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Wear breathing apparatus if exposed to vapors/dusts/aerosols.

**Hand Protection**

Impervious gloves. Wear suitable gloves. 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**

Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear safety glasses with side-shields.

**Skin and body protection**

Long sleeved clothing. Wear suitable protective clothing.

**General Hygiene Considerations**

Do not breathe dust. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**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**

None under normal processing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

Physical state Solid Powder  
 Appearance powder  
 Color yellow  
 Odor Odorless  
 Odor threshold No data available

Property	Values	Remarks • Method
Molecular weight	No data available	
pH	8.2	5% Solution
Melting point/freezing point	No data available	
Boiling point / boiling range	No data available	
Evaporation rate	Not applicable	

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**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<sub>ow</sub> ~ 0  
**Soil Organic Carbon-Water Partition Coefficient** log K<sub>oc</sub> ~ 0  
**Autoignition temperature** No data available  
**Decomposition temperature** 100 °C / 212 °F  
**Dynamic viscosity** Not applicable  
**Kinematic viscosity** Not applicable

**Solubility(ies)**

**Water solubility**

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

**Solubility in other solvents**

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

**Other information**

**Metal Corrosivity**

**Steel Corrosion Rate** No data available  
**Aluminum Corrosion Rate** No data available

**Volatile Organic Compounds (VOC) Content**  
Not applicable

<b>Chemical name</b>	<b>CAS No</b>	<b>Volatile organic compounds (VOC) content</b>	<b>CAA (Clean Air Act)</b>
Sodium bicarbonate	144-55-8	No data available	-
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt	7789-00-6	Not applicable	-

**Explosive properties**

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

**Flammable properties**

**Flash point** Not applicable

**Flammability Limit in Air**

**Upper flammability limit:** No data available  
**Lower flammability limit:** No data available

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**Oxidizing properties**

No data available.

**Bulk density**

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.

**Hazardous polymerization**

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.

**Acute toxicity**

Harmful if swallowed

Fatal if inhaled

**Product Acute Toxicity Data**

Test data reported below.

**Oral Exposure Route**

<u>Endpoint type</u>	<u>Toxicological effects</u>	<u>Key literature references and sources for data</u>
Rat LD <sub>50</sub>	<b>Behavioral</b> Flaccid muscle tone Lethargy Loss of righting reflex Prostration <b>Endocrine</b> Abnormalities of the spleen <b>Eye</b> Ptosis <b>Gastrointestinal</b> Abnormalities of the gastrointestinal tract Mucoid diarrhea <b>Liver</b> Abnormalities of the liver <b>Lungs, Thorax, or Respiration</b> Abnormalities of the lungs Dyspnea Red or brown staining of the nose/mouth area Tachypnea <b>Nutritional and Gross Metabolic</b> Wetness of the anogenital area <b>Reproductive</b> <b>Skin and Appendages</b> Piloerection Wetness of the nose/mouth	Outside testing

**Inhalation (Gas) Exposure Route**

**Ingredient Acute Toxicity Data**

Test data reported below.

**Oral Exposure Route**

<b>Chemical name</b>	<b>Endpoint type</b>	<b>Reported dose</b>	<b>Exposure time</b>	<b>Toxicological effects</b>	<b>Key literature references and sources for data</b>
Sodium bicarbonate (50 - 60%) CAS#: 144-55-8	Rat LD <sub>50</sub>	4220 mg/kg	None reported	None reported	Vendor SDS
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (50 - 60%)	Mouse LD <sub>50</sub>	180 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)



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CAS#: 7789-00-6					
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#### 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 LC <sub>50</sub>	> 4.47 mg/L	4 hours	None reported	OECD 429: Skin Sensitization: Local Lymph Node Assay
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (50 - 60%) CAS#: 7789-00-6	LC <sub>50</sub> 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

<b>ATEmix (oral)</b>	No information available
<b>ATEmix (dermal)</b>	No information available
<b>ATEmix (inhalation-dust/mist)</b>	0.120 mg/l
<b>ATEmix (inhalation-vapor)</b>	No information available
<b>ATEmix (inhalation-gas)</b>	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 (H <sub>2</sub> CrO <sub>4</sub> ), 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)

#### Serious eye damage/irritation

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.

Chemical name	Test method	Species	Reported	Exposure	Results	Key literature
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			dose	time		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 (H <sub>2</sub> CrO <sub>4</sub> ), 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 <sub>Lo</sub>	1260 mg/kg	None reported	<b>Kidney, Ureter, or Bladder</b> Urine volume increased <b>Lungs, Thorax, or Respiration</b> 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 <sub>Lo</sub>	20 mg/kg	5 days	<b>Gastrointestinal</b> Nausea or vomiting <b>Nutritional and Gross Metabolic</b> 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 <sub>Lo</sub>	77.2 mg/L	119 days	<b>Blood</b> Changes in serum composition (e.g. TP, bilirubin, cholesterol) <b>Cardiac</b> Other changes <b>Nutritional and Gross Metabolic</b> 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 (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt	7789-00-6	A1	Group 1	Known	X

#### Legend

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

#### Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (50 - 60%) CAS#: 7789-00-6	Mouse	1600 mg/kg	62 weeks	<b>Blood</b> Leukemia <b>Lungs, Thorax, or Respiration</b>	RTECS (Registry of Toxic Effects of Chemical Substances)

#### Germ cell mutagenicity

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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.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (50 - 60%) CAS#: 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 (H <sub>2</sub> CrO <sub>4</sub> ), 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)	ECHA (The European Chemicals Agency)

**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.

**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	<i>Lepomis macrochirus</i>	LC <sub>50</sub>	7100 mg/L	PEEN (Pan European Ecological Network)
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (50 - 60%) CAS#: 7789-00-6	96 hours	<i>Pimephales promelas</i>	LC <sub>50</sub>	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	<i>Daphnia magna</i>	EC <sub>50</sub>	4100 mg/L	PEEN (Pan European Ecological Network)
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (50 - 60%) CAS#: 7789-00-6	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	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 (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (50 - 60%) CAS#: 7789-00-6	72 Hours	<i>Nitzschia sp.</i>	EC <sub>50</sub>	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 (H <sub>2</sub> CrO <sub>4</sub> ),	21 days	<i>Daphnia magna</i>	NOEC	35 mg/L	ECHA (The European Chemicals Agency)

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dipotassium salt (50 - 60%) CAS#: 7789-00-6					
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### 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  $K_{ow}$  ~ 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

<b>UN/ID no</b>	UN3288
<b>Proper shipping name</b>	Toxic solid, inorganic, n.o.s.
<b>DOT Technical Name</b>	Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt
<b>Transport hazard class(es)</b>	6.1
<b>Packing Group</b>	III
<b>Description</b>	UN3288, Toxic solid, inorganic, n.o.s. (Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt), 6.1, III
<b>Emergency Response Guide Number</b>	151

### TDG

<b>UN/ID no</b>	UN3288
<b>Proper shipping name</b>	Toxic solid, inorganic, n.o.s.
<b>TDG Technical Name</b>	Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt
<b>Transport hazard class(es)</b>	6.1
<b>Packing Group</b>	III
<b>Description</b>	UN3288, Toxic solid, inorganic, n.o.s. (Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt), 6.1, III

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#### IATA

<b>UN number or ID number</b>	UN3288
<b>Proper shipping name</b>	Toxic solid, inorganic, n.o.s.
<b>IATA Technical Name</b>	Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt
<b>Transport hazard class(es)</b>	6.1
<b>Packing group</b>	III
<b>ERG Code</b>	6L
<b>Special precautions for user</b>	A3,A5

#### IMDG

<b>UN number or ID number</b>	UN3288
<b>Proper shipping name</b>	Toxic solid, inorganic, n.o.s.
<b>IMDG Technical Name</b>	Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt
<b>Transport hazard class(es)</b>	6.1
<b>Packing Group</b>	III
<b>EmS-No</b>	F-A, S-A
<b>Special precautions for user</b>	223, 274
<b>Marine pollutant</b>	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

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies

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

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

#### International Inventories

<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL - Existing substances</b>	Complies
<b>PICCS</b>	Complies
<b>TCSI</b>	Complies
<b>AICS</b>	Complies
<b>NZIoC</b>	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

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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 (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (CAS #: 7789-00-6)	0.1

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	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 (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt 7789-00-6	10 lb	X	-	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

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt 7789-00-6	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Chromic acid (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt (CAS #: 7789-00-6)	Carcinogen Developmental Female Reproductive Male Reproductive



**WARNING:** This product can expose you to chemicals including Chromic acid (H<sub>2</sub>CrO<sub>4</sub>), 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 (H <sub>2</sub> CrO <sub>4</sub> ), dipotassium salt 7789-00-6	X	X	X



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**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**

None

**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 7789-00-6	Declarable Substance (LR) Prohibited Substance (LR)	3 mg/kg 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 - X - I

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

NIOSH IDLH *Immediately Dangerous to Life or Health*  
 ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)  
 NDF *no 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
X	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*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

Prepared By Hach Product Compliance Department

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**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**