



Be Right™

# SAFETY DATA SHEET

Issue Date 16-Aug-2018

Revision Date 24-Jun-2019

Version 3.4

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## 1. IDENTIFICATION

### Product identifier

**Product Name** Calcium Chloride Standard Solution, 1000 mg/L as CaCO<sub>3</sub>

### Other means of identification

**Product Code(s)** 12153

**Safety data sheet number** M00739

### Recommended use of the chemical and restrictions on use

**Recommended Use** Standard solution.

**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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### **Hazards not otherwise classified (HNOC)**

Not applicable

### Label elements

#### **Signal word**

None

#### **Hazard statements**

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

### Other Hazards Known

None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Substance**

Not applicable

**Mixture**

**Chemical Family**

Mixture.

**Chemical nature**

Aqueous solution of inorganic acids and salts.

Chemical name	CAS No.	Percent Range	HMRIC #
Carbonic acid, calcium salt (1:1)	471-34-1	<1%	-
Hydrochloric acid	7647-01-0	<0.1%	-
Formaldehyde	50-00-0	<0.1%	-
Methanol	67-56-1	<0.1%	-

#### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**

No hazards which require special first aid measures. Use first aid treatment according to the nature of the injury.

**Inhalation**

Remove to fresh air.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact**

Wash skin with soap and water.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**

See Section 11 for additional Toxicological Information.

**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**

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

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#### 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** Ensure adequate ventilation.

#### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

#### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**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.

#### Conditions for safe storage, including any incompatibilities

**Storage Conditions** 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
Carbonic acid, calcium salt (1:1) CAS#: 471-34-1	NDF	NDF	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Hydrochloric acid CAS#: 7647-01-0	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m <sup>3</sup> Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>
Formaldehyde CAS#: 50-00-0	STEL: 0.3 ppm TWA: 0.1 ppm	TWA: 0.75 ppm (vacated) TWA: 3 ppm (vacated) STEL: 10 ppm (vacated) Ceiling: 5 ppm	IDLH: 20 ppm Ceiling: 0.1 ppm 15 min TWA: 0.016 ppm

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		STEL: 2 ppm	
Methanol CAS#: 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m <sup>3</sup> (vacated) SKN*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 325 mg/m <sup>3</sup>

**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.

**Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin and body protection**

No special protective equipment required.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice.

**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**

<b>Physical state</b>	Liquid	<b>Color</b>	colorless
<b>Appearance</b>	aqueous solution	<b>Odor threshold</b>	Not applicable
<b>Odor</b>	Odorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	Not applicable	
pH	4.2	
Melting point/freezing point	~ 0 °C / 32 °F	
Boiling point / boiling range	~ 100 °C / 212 °F	
Evaporation rate	0.92 (water = 1)	
Vapor pressure	23.777 mm Hg / 3.17 kPa at 25 °C / 77 °F	
Vapor density (air = 1)	0.62	
Specific gravity (water = 1 / air = 1)	0.99	
Partition Coefficient (n-octanol/water)	No data available	
Soil Organic Carbon-Water Partition	No data available	

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**Coefficient**

**Autoignition temperature** No data available

**Decomposition temperature** No data available

**Dynamic viscosity** ~ 1 cP (mPa s) at 20 °C / 68 °F

**Kinematic viscosity** ~ 1.01 cSt (mm<sup>2</sup>/s) at 20 °C / 68 °F

**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
Most Polar Organic Solvents	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**

See ingredients information below

<b>Chemical name</b>	<b>CAS No.</b>	<b>Volatile organic compounds (VOC) content</b>	<b>CAA (Clean Air Act)</b>
Carbonic acid, calcium salt (1:1)	471-34-1	No data available	-
Hydrochloric acid	7647-01-0	Not applicable	-
Formaldehyde	50-00-0	No data available	X
Methanol	67-56-1	100%	X

**Explosive properties**

**Upper explosion limit**

Not applicable

**Lower explosion limit**

Not applicable

**Flammable properties**

**Flash point**

No data available

**Flammability Limit in Air**

**Upper flammability limit**

No data available

**Lower flammability limit**

No data available

**Oxidizing properties**

No data available.

**Bulk density**

Not applicable

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## 10. STABILITY AND REACTIVITY

### Reactivity

Not applicable.

### 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

Hazardous polymerization does not occur.

### Conditions to avoid

None known based on information supplied.

### Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

### Hazardous Decomposition Products

Hydrogen chloride. Formaldehyde.

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

#### Product Information

**Inhalation** No known effect based on information supplied.

**Eye contact** No known effect based on information supplied.

**Skin contact** No known effect based on information supplied.

**Ingestion** No known effect based on information supplied.

**Symptoms** No information available.

### Acute toxicity

Based on available data, the classification criteria are not met

### Product Acute Toxicity Data

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
Carbonic acid, calcium salt (1:1) (<1%)	Rat LD <sub>50</sub>	6450 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident

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CAS#: 471-34-1					Insurance)
Formaldehyde (<0.1%) CAS#: 50-00-0	Rat LD <sub>50</sub>	100 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Methanol (<0.1%) CAS#: 67-56-1	None reported	None reported	None reported	None reported	No information available
<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>
Formaldehyde (<0.1%) CAS#: 50-00-0	Rabbit LD <sub>50</sub>	270 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Methanol (<0.1%) CAS#: 67-56-1	None reported	None reported	None reported	None reported	No information available
<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>
Formaldehyde (<0.1%) CAS#: 50-00-0	Rat LC <sub>50</sub>	0.578 mg/L	4 hours	None reported	LOLI
Methanol (<0.1%) CAS#: 67-56-1	None reported	None reported	None reported	None reported	No information available

**Unknown Acute Toxicity**

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

**Acute Toxicity Estimations (ATE)**

Not applicable

<b>ATEmix (oral)</b>	No information available
<b>ATEmix (dermal)</b>	No information available
<b>ATEmix (inhalation-dust/mist)</b>	No information available
<b>ATEmix (inhalation-vapor)</b>	No information available
<b>ATEmix (inhalation-gas)</b>	No information available

**Skin corrosion/irritation**

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

**Product Skin Corrosion/Irritation Data**

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
Carbonic acid, calcium salt (1:1) (<1%) CAS#: 471-34-1	Standard Draize Test	Rabbit	500 mg	24 hours	Moderate	RTECS (Registry of Toxic Effects of Chemical Substances)
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Existing human experience	Human	None reported	None reported	Corrosive to skin	RTECS (Registry of Toxic Effects of Chemical Substances)
Formaldehyde (<0.1%)	Standard Draize Test	Human	0.150 mg	72 hours	Corrosive to skin	RTECS (Registry of Toxic Effects of

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CAS#: 50-00-0						Chemical Substances)
Methanol (<0.1%) CAS#: 67-56-1	Standard Draize Test	Rabbit	20 mg	24 hours	Skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

**Serious eye damage/irritation**

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

**Product Serious Eye Damage/Eye Irritation Data**

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
Carbonic acid, calcium salt (1:1) (<1%) CAS#: 471-34-1	Standard Draize Test	Rabbit	0.750 mg	24 hours	SEVERE	RTECS (Registry of Toxic Effects of Chemical Substances)
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Existing human experience	Human	None reported	None reported	Corrosive to eyes	RTECS (Registry of Toxic Effects of Chemical Substances)
Formaldehyde (<0.1%) CAS#: 50-00-0	Rinse Test	Human	1 ppm	6 minutes	Corrosive to eyes	RTECS (Registry of Toxic Effects of Chemical Substances)
Methanol (<0.1%) CAS#: 67-56-1	Standard Draize Test	Rabbit	40 mg	None reported	Eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

**Respiratory or skin sensitization**

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

**Product Sensitization Data**

No data available.

**Ingredient Sensitization Data**

No data available.

Chemical name	Test method	Species	Results	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	Patch test	Human	Confirmed to be a skin sensitizer	ERMA (New Zealand's Environmental Risk Management Authority)
Methanol (<0.1%) CAS#: 67-56-1	OECD Test No. 406: Skin Sensitization	Guinea pig	Not confirmed to be a skin sensitizer	ECHA (The European Chemicals Agency)
Chemical name	Test method	Species	Results	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	IgE Specific Immune Response Test	Guinea pig	Confirmed to be a respiratory sensitizer	CICAD (Concise International Chemical Assessment Documents)

**STOT - single exposure**

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

**Product Specific Target Organ Toxicity Single Exposure Data**

No data available.

**Ingredient Specific Target Organ Toxicity Single Exposure Data**

No data available.



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Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Man LD <sub>Lo</sub>	2.857 mg/kg	None reported	<b>Vascular</b> BP lowering not characterized in autonomic section <b>Lungs, Thorax, or Respiration</b> Respiratory depression <b>Gastrointestinal</b> Other changes	RTECS (Registry of Toxic Effects of Chemical Substances)
Formaldehyde (<0.1%) CAS#: 50-00-0	Human LD <sub>Lo</sub>	70 mg/kg	None reported	<b>Gastrointestinal</b> <b>Kidney, Ureter, or Bladder</b> <b>Liver</b> Other changes Ulcerated stomach Other changes	RTECS (Registry of Toxic Effects of Chemical Substances)
Methanol (<0.1%) CAS#: 67-56-1	Human LD <sub>Lo</sub>	143 mg/kg	None reported	<b>Lungs, Thorax, or Respiration</b> Dyspnea	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Human TC <sub>Lo</sub>	0.05 mg/L	None reported	<b>Lungs, Thorax, or Respiration</b> Cough	RTECS (Registry of Toxic Effects of Chemical Substances)
Methanol (<0.1%) CAS#: 67-56-1	Human TC <sub>Lo</sub>	300 mg/L	None reported	<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**

No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Rat TC <sub>Lo</sub>	0.000685 mg/L	84 days	<b>Behavioral</b> Muscle contraction or spasticity <b>Biochemical</b> Enzyme inhibition, induction, or change in blood or tissue levels (true cholinesterase) <b>Kidney, Ureter, or Bladder</b> Other changes in urine composition	RTECS (Registry of Toxic Effects of Chemical Substances)
Formaldehyde (<0.1%) CAS#: 50-00-0	Human TC <sub>Lo</sub>	0.017 mg/L	0.5 days	<b>Eye</b> <b>Lungs, Thorax, or Respiration</b> Lacrimation Other changes	RTECS (Registry of Toxic Effects of Chemical Substances)

**Carcinogenicity**

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

**Product Carcinogenicity Data**

No data available.

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### Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Carbonic acid, calcium salt (1:1)	471-34-1	-	-	-	-
Hydrochloric acid	7647-01-0	-	Group 3	-	X
Formaldehyde	50-00-0	A1	Group 1	Known	X
Methanol	67-56-1	-	-	-	-

### 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 (Occupational Safety and Health Administration of the US Department of Labor)	Does not apply

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	Rat	15 mg/L	78 weeks	Olfaction Tumors	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

No data available.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Cytogenetic analysis	Hamster lung	30 mmol/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)
Methanol (<0.1%) CAS#: 67-56-1	DNA inhibition	Human lymphocyte	300 mmol/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

No data available.

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Methanol (<0.1%) CAS#: 67-56-1	DNA damage	Rat	0.405 mg/kg	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and

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						<b>sources for data</b>
Formaldehyde (<0.1%) CAS#: 50-00-0	Micronucleus test	Human	.000985 mg/L	8.5 years	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**

No data available.

<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>
Methanol (<0.1%) CAS#: 67-56-1	Rat TD <sub>Lo</sub>	4118 mg/kg	10 days	<b>Effects on Embryo or Fetus Specific Developmental Abnormalities</b> Ear Eye Fetotoxicity (except death e.g. stunted fetus) Urogenital System	RTECS (Registry of Toxic Effects of Chemical Substances)
<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>
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Rat TC <sub>Lo</sub>	0.450 mg/L	1 hours	<b>Effects on Embryo or Fetus Fetotoxicity (except death e.g. stunted fetus) Specific Developmental Abnormalities</b> Homeostasis	RTECS (Registry of Toxic Effects of Chemical Substances)
Methanol (<0.1%) CAS#: 67-56-1	Rat TC <sub>Lo</sub>	0.0026 mg/L	22 days	<b>Effects on Embryo or Fetus Fetotoxicity (except death e.g. stunted fetus)</b>	RTECS (Registry of Toxic Effects of Chemical Substances)
<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>
Formaldehyde (<0.1%) CAS#: 50-00-0	Rat TC <sub>Lo</sub>	40 mg/L	14 days	<b>Effects on Embryo or Fetus Fetotoxicity (except death e.g. stunted fetus)</b>	RTECS (Registry of Toxic Effects of Chemical Substances)

#### **Aspiration hazard**

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

## **12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

#### **Unknown aquatic toxicity**

0% of the mixture consists of components(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**

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**Aquatic Acute Toxicity**

No data available.

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Carbonic acid, calcium salt (1:1) (<1%) CAS#: 471-34-1	96 hours	<i>Gambusia affinis</i>	LC <sub>50</sub>	56000 mg/L	PEEN (Pan European Ecological Network)
Formaldehyde (<0.1%) CAS#: 50-00-0	96 hours	<i>Morone saxatilis</i>	LC <sub>50</sub>	6.7 mg/L	PEEN (Pan European Ecological Network)
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Formaldehyde (<0.1%) CAS#: 50-00-0	48 Hours	<i>Daphnia pulex</i>	EC <sub>50</sub>	5.8 mg/L	PEEN (Pan European Ecological Network)

**Aquatic Chronic Toxicity**

No data available.

**Persistence and degradability**

**Product Biodegradability Data**

No data available.

**Bioaccumulation**

**Product Bioaccumulation Data**

No data available.

**Partition Coefficient (n-octanol/water)**

No data available

**Mobility**

**Soil Organic Carbon-Water Partition Coefficient**

No data available

**Other adverse effects**

Contains a substance with an endocrine-disrupting potential.

**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**

U122 U154

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Formaldehyde 50-00-0	U122	Included in waste streams: K009, K010, K038, K040, K156, K157	-	U122
Methanol 67-56-1	-	Included in waste stream: F039	-	U154

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**Special instructions for disposal** Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Flush system with plenty of water.

#### 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** 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** Does not comply  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**TCSI** Complies  
**AICS** Complies  
**NZIoC** Does not comply

**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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
EN / AGHS	

Product Code(s) 12153

Product Name Calcium Chloride Standard Solution, 1000 mg/L as CaCO<sub>3</sub>

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Hydrochloric acid (CAS #: 7647-01-0)	1.0
Formaldehyde (CAS #: 50-00-0)	0.1
Methanol (CAS #: 67-56-1)	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	No
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
Hydrochloric acid 7647-01-0	5000 lb	-	-	X
Formaldehyde 50-00-0	100 lb	-	-	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)
Hydrochloric acid 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ
Formaldehyde 50-00-0	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ
Methanol 67-56-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues**

Chemical name	U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Release - Toxic (concentration >=37%); Release - Toxic (anhydrous); Theft - Weapons of Mass Effect (anhydrous)
Formaldehyde (<0.1%) CAS#: 50-00-0	Release - Toxic (solution)

**U.S. - DEA (Drug Enforcement Administration) List I & List II**

Chemical name	U.S. - DEA (Drug Enforcement Administration) - List I or Precursor Chemicals	U.S. - DEA (Drug Enforcement Administration) - List II or Essential Chemicals
Hydrochloric acid (<0.1%) CAS#: 7647-01-0	Not Listed	0.0 kg Domestic Sales Weight (listed under anhydrous Hydrogen chloride); 50 gallon Export Volume (exports, transshipments and international transactions to designated countries); 27 kg Export Weight (exports, transshipments and international transactions to designated countries, listed under anhydrous Hydrogen chloride)

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### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Formaldehyde (CAS #: 50-00-0)	Carcinogen
Methanol (CAS #: 67-56-1)	Developmental



**WARNING:** This product can expose you to chemicals including Formaldehyde, Methyl alcohol, which are known to the State of California to cause cancer or birth defects or reproductive harm.

For more information, go to <http://www.P65Warnings.ca.gov>

IMERC: Not applicable

#### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hydrochloric acid 7647-01-0	X	X	X
Formaldehyde 50-00-0	X	X	X
Methanol 67-56-1	X	X	X

#### U.S. EPA Label Information

Chemical name	FIFRA	FDA
Carbonic acid, calcium salt (1:1)	180.0910	21 CFR 184.1191
Hydrochloric acid	180.0910	21 CFR 182.1057
Methanol	180.0910	-

### 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 Thresholds
Formaldehyde 50-00-0	Declarable Substance (LR) Prohibited Substance (LR) Declarable Substance (Fi) Prohibited Substance (Fi)	0.0 % 0.1 %
Methanol 67-56-1	Declarable Substance (Fi) Prohibited Substance (Fi) Declarable Substance (LR) Prohibited Substance (LR)	0.1 %

#### NFPA and HMIS Classifications

Product Code(s) 12153

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<b>NFPA</b>	<b>Health hazards</b> - 0	<b>Flammability</b> - 0	<b>Instability</b> - 0	<b>Physical and chemical properties</b> -
<b>HMIS</b>	<b>Health hazards</b> - 0	<b>Flammability</b> - 0	<b>Physical hazards</b> - 0	<b>Personal protection</b> - X

**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

**Issue Date** 16-Aug-2018

**Revision Date** 24-Jun-2019

**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**