



**Be Right™**

# SAFETY DATA SHEET

Issue Date 11-Dec-2017

Revision Date 11-Dec-2017

Version 2.2

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## 1. IDENTIFICATION

### Product identifier

**Product Name** Effervescent Tablet

### Other means of identification

**Product Code(s)** 1453300S

**Safety data sheet number** M00558

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

**Recommended Use** Laboratory reagent.

**Uses advised against** None.

**Restrictions on use** None.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

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

#### **Emergency telephone number**

+1(303) 623-5716 - 24 Hour Service +1(515)232-2533 - 8am - 4pm CST

## 2. HAZARDS IDENTIFICATION

### Classification

#### **Regulatory Status**

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

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	
Skin sensitization	
Mutagenicity	
Carcinogenicity	
Reproductive toxicity	
Specific target organ toxicity (single exposure)	
Specific target organ toxicity (repeated exposure)	

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

**Signal word - Warning**

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#### **Hazard statements**

H315 - Causes skin irritation  
H319 - Causes serious eye irritation

#### **Precautionary statements**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P280 - Wear protective gloves/protective clothing/eye protection/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 advice/attention

#### **Other Information**

May be harmful if swallowed  
May be harmful in contact with skin

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### **Substance**

Not applicable

#### **Mixture**

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
Sodium bicarbonate	144-55-8	40 - 50%	-
Citric acid	77-92-9	40 - 50%	-

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing.

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

<b>Symptoms</b>	Burning sensation.
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##### Indication of any immediate medical attention and special treatment needed

#### 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>	No information available.
<b>Hazardous combustion products</b>	No information available.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>U.S. Notice</b>	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.
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##### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.
<b>Other Information</b>	Refer to protective measures listed in Sections 7 and 8.

##### Environmental precautions

**Environmental precautions** 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** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

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

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

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

**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. Impervious gloves.

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**General Hygiene Considerations** Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

**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  
Appearance tablet  
Odor None  
Color white  
Odor threshold No data available

Property	Values	Remarks • Method
Molecular weight	No data available	
pH	No data available	
Melting point/freezing point	No data available	
Boiling point / boiling range	No data available	
Evaporation rate	Not applicable	
Vapor pressure	Not applicable	
Vapor density (air = 1)	Not applicable	
Specific gravity (water = 1 / air = 1)	No data available	
Partition Coefficient (n-octanol/water)	log K <sub>ow</sub> ~ -0.4	
Soil Organic Carbon-Water Partition Coefficient	log K <sub>oc</sub> ~ -0.27	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
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	Solubility	Solubility Temperature
None reported	No information available	No data available	No information available

### Other Information

#### Metal Corrosivity

Steel Corrosion Rate Not applicable  
Aluminum Corrosion Rate Not applicable

#### Volatile Organic Compounds (VOC) Content

Not applicable

Chemical name	CAS No.	CAA (Clean Air Act)
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Chemical name	CAS No.	CAA (Clean Air Act)
Sodium bicarbonate	144-55-8	-
Citric acid	77-92-9	-

#### Explosive properties

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

#### Flammable properties

**Flash point** Not applicable  
**Method** No information available

#### Flammability Limit in Air

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

#### Oxidizing properties

No data available.

#### Bulk density

No data available

**Particle Size** No information available

**Particle Size Distribution** No information available

## 10. STABILITY AND REACTIVITY

#### Reactivity

Not applicable.

#### Chemical stability

**Stability** Stable under normal conditions.

#### Explosion data

**Sensitivity to Mechanical Impact** None

**Sensitivity to Static Discharge** None.

#### Possibility of Hazardous Reactions

**Possibility of Hazardous Reactions** None under normal processing.

#### Hazardous polymerization

None under normal processing.

#### Conditions to avoid

**Conditions to avoid** None known based on information supplied.

#### Incompatible materials

**Incompatible materials** Strong acids. Strong bases. Strong oxidizing agents.

#### Hazardous Decomposition Products

Carbon dioxide. Carbon monoxide. Sodium oxides. Potassium oxide.

## 11. TOXICOLOGICAL INFORMATION

#### Information on Likely Routes of Exposure

##### Product Information

**Inhalation** Specific test data for the substance or mixture is not available. May cause irritation of

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**Eye contact** respiratory tract.  
Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation.

**Skin contact** Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Symptoms** Redness. May cause redness and tearing of the eyes.

**Aggravated Medical Conditions** Skin disorders. Eye disorders.

**Toxicologically synergistic products** None known.

**Toxicokinetics, metabolism and distribution** See ingredients information below.

Chemical name	Toxicokinetics, metabolism and distribution
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	The major extracellular buffer in the blood and the interstitial fluid of vertebrates is the bicarbonate buffer system.

#### Product Acute Toxicity Data

**Oral Exposure Route** No data available  
**Dermal Exposure Route** No data available  
**Inhalation (Dust/Mist) Exposure Route** No data available  
**Inhalation (Vapor) Exposure Route** No data available  
**Inhalation (Gas) Exposure Route** No data available

#### 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>	3,334.00 mg/kg
<b>ATEmix (dermal)</b>	4,545.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	41.67 mg/L
<b>ATEmix (inhalation-vapor)</b>	167.00 mg/L

#### Ingredient Acute Toxicity Data

##### **Oral Exposure Route**

If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	Rat LD <sub>50</sub>	4220 mg/kg	None reported	None reported	Vendor SDS
Citric acid (40 - 50%) CAS#: 77-92-9	Rat LD <sub>50</sub>	3000 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	Mouse LD <sub>50</sub>	3360 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)

##### **Dermal Exposure Route**

If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
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Citric acid (40 - 50%) CAS#: 77-92-9	Rat LD <sub>50</sub>	> 2000 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
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**Inhalation (Dust/Mist) Exposure Route** If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	Rat LC <sub>50</sub>	> 4.47 mg/L	4 hours	None reported	OECD (Organization for Economic Co-operation and Development)

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

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

**Oral Exposure Route** No data available

**Dermal Exposure Route** No data available

**Inhalation (Dust/Mist) Exposure Route** No data available

**Inhalation (Vapor) Exposure Route** No data available

**Inhalation (Gas) Exposure Route** No data available

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

**Oral Exposure Route** If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) 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)

**Dermal Exposure Route** If available, see data below

**Inhalation (Dust/Mist) Exposure Route** If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	Rat TD <sub>Lo</sub>	0.180 mg/L	None reported	<b>Lungs, Thorax, or Respiration</b> Other changes <b>Liver</b> Impaired liver function tests <b>Biochemical</b> Enzyme inhibition, induction, or change in blood or tissue levels (dehydrogenases)	RTECS (Registry of Toxic Effects of Chemical Substances)

**Inhalation (Vapor) Exposure Route** If available, see data below

**Inhalation (Gas) Exposure Route** If available, see data below

**Aspiration toxicity**

If available, see data below

**Kinematic viscosity**

Not applicable

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium bicarbonate	Standard Draize	Human	30 mg	3 days	Mild skin irritant	RTECS (Registry of



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(40 - 50%) CAS#: 144-55-8	Test					Toxic Effects of Chemical Substances)
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#### **Product Serious Eye Damage/Eye Irritation Data**

No data available.

#### **Ingredient Eye Damage/Eye Irritation Data**

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	Standard Draize Test	Rabbit	100 mg	0.5 minutes	Mild eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

#### **Sensitization Information**

##### **Product Sensitization Data**

**Skin Sensitization Exposure Route**

No data available.

**Respiratory Sensitization Exposure Route**

No data available.

##### **Ingredient Sensitization Data**

**Skin Sensitization Exposure Route**

If available, see data below.

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	Based on human experience	Human	Not confirmed to be a skin sensitizer	No information available

**Respiratory Sensitization Exposure Route**

If available, see data below.

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	Based on human experience	Human	Not confirmed to be a respiratory sensitizer	No information available

#### **Chronic Toxicity Information**

##### **Product Specific Target Organ Toxicity Repeat Dose Data**

**Oral Exposure Route**

No data available.

**Dermal Exposure Route**

No data available.

**Inhalation (Dust/Mist) Exposure Route**

No data available.

**Inhalation (Vapor) Exposure Route**

No data available.

**Inhalation (Gas) Exposure Route**

No data available.

##### **Ingredient Specific Target Organ Toxicity Repeat Exposure Data**

**Oral Exposure Route**

If available, see data below

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	Man TD <sub>Lo</sub>	20 mg/kg	5 days	<b>Gastrointestinal</b> Nausea or vomiting <b>Nutritional and Gross</b> <b>Metabolic</b> Metabolic acidosis	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
Citric acid (40 - 50%) CAS#: 77-92-9	Rat TD <sub>Lo</sub>	930 mg/kg	15 days	<b>Biochemical</b> Enzyme inhibition, induction, or change in blood or tissue levels (dehydrogenases) <b>Blood</b>	RTECS (Registry of Toxic Effects of Chemical Substances)

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				Changes in serum composition (e.g. TP, bilirubin, cholesterol)	
<b>Dermal Exposure Route</b>				If available, see data below	
<b>Inhalation (Dust/Mist) Exposure Route</b>				If available, see data below	
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) 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)
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Citric acid (40 - 50%) CAS#: 77-92-9	Rat TD <sub>Lo</sub>	0.180 mg/L	None reported	<b>Lungs, Thorax, or Respiration</b> Other changes <b>Liver</b> Impaired liver function tests <b>Biochemical</b> Enzyme inhibition, induction, or change in blood or tissue levels (dehydrogenases)	RTECS (Registry of Toxic Effects of Chemical Substances)
<b>Inhalation (Vapor) Exposure Route</b>				If available, see data below	
<b>Inhalation (Gas) Exposure Route</b>				If available, see data below	

#### Product Carcinogenicity Data

<b>Oral Exposure Route</b>	No data available
<b>Dermal Exposure Route</b>	No data available
<b>Inhalation (Dust/Mist) Exposure Route</b>	No data available
<b>Inhalation (Vapor) Exposure Route</b>	No data available
<b>Inhalation (Gas) Exposure Route</b>	No data available

#### Ingredient Carcinogenicity Data

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sodium bicarbonate	144-55-8	-	-	-	-
Citric acid	77-92-9	-	-	-	-

#### Legend

<b>ACGIH (American Conference of Governmental Industrial Hygienists)</b>	Does not apply
<b>IARC (International Agency for Research on Cancer)</b>	Does not apply
<b>NTP (National Toxicology Program)</b>	Does not apply
<b>OSHA (Occupational Safety and Health Administration of the US Department of Labor)</b>	Does not apply

<b>Oral Exposure Route</b>	If available, see data below
<b>Dermal Exposure Route</b>	If available, see data below
<b>Inhalation (Dust/Mist) Exposure Route</b>	If available, see data below
<b>Inhalation (Vapor) Exposure Route</b>	If available, see data below
<b>Inhalation (Gas) Exposure Route</b>	If available, see data below

#### Product Germ Cell Mutagenicity *in vitro* Data

No data available.

#### Ingredient Germ Cell Mutagenicity *in vitro* Data

No data available

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**Product Germ Cell Mutagenicity *invivo* Data**

Oral Exposure Route No data available  
Dermal Exposure Route No data available  
Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available

**Ingredient Germ Cell Mutagenicity *invivo* Data**

Oral Exposure Route If available, see data below

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) 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)

Dermal Exposure Route If available, see data below  
Inhalation (Dust/Mist) Exposure Route If available, see data below  
Inhalation (Vapor) Exposure Route If available, see data below  
Inhalation (Gas) Exposure Route If available, see data below

**Product Reproductive Toxicity Data**

Oral Exposure Route No data available  
Dermal Exposure Route No data available  
Inhalation (Dust/Mist) Exposure Route No data available  
Inhalation (Vapor) Exposure Route No data available  
Inhalation (Gas) Exposure Route No data available

**Ingredient Reproductive Toxicity Data**

Oral Exposure Route If available, see data below  
Inhalation (Dust/Mist) Exposure Route If available, see data below  
Inhalation (Vapor) Exposure Route If available, see data below  
Inhalation (Gas) Exposure Route If available, see data below

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Product Ecological Data**

**Aquatic toxicity**

Fish No data available  
Crustacea No data available  
Algae No data available

**Ingredient Ecological Data**

**Aquatic toxicity**

Fish If available, see ingredient data below

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	96 hours	<i>Lepomis macrochirus</i>	LC <sub>50</sub>	7100 mg/L	PEEN (Pan European Ecological Network)
Citric acid (40 - 50%) CAS#: 77-92-9	96 hours	<i>Lepomis macrochirus</i>	LC <sub>50</sub>	1516 mg/L	IUCLID (The International Uniform Chemical Information Database)

Crustacea If available, see ingredient data below

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Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	4100 mg/L	PEEN (Pan European Ecological Network)

**Algae**

No data available

#### Other Information

#### Persistence and degradability

##### **Product Biodegradability Data**

If available, see ingredient data below.

##### **Ingredient Biodegradability Data**

Test data reported below

Chemical name	Test method	Biodegradation	Exposure time	Results
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	None reported	None reported	None reported	Readily biodegradable
Citric acid (40 - 50%) CAS#: 77-92-9	None reported	None reported	None reported	Readily biodegradable

#### Bioaccumulation

##### **Product Bioaccumulation Data**

If available, see ingredient data below.

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

log K<sub>ow</sub> ~ -0.4

##### **Ingredient Bioaccumulation Data**

No data available

Chemical name	Test method	Exposure time	Species	Bioconcentration factor (BCF)	Results
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	None reported	None reported	None reported	None reported	Does not have the potential to bioaccumulate
Citric acid (40 - 50%) CAS#: 77-92-9	None reported	None reported	None reported	None reported	Does not have the potential to bioaccumulate

Chemical name	Partition Coefficient (n-octanol/water)	Method
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	log K <sub>ow</sub> ~ 0	No information available
Citric acid (40 - 50%) CAS#: 77-92-9	log K <sub>ow</sub> = -1.72	No information available

#### Mobility

#### **Product Information**

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**Soil Organic Carbon-Water Partition Coefficient**

$\log K_{oc} \sim -0.27$

**Water solubility**

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

**Ingredient Information**

<b>Chemical name</b>	<b>Soil Organic Carbon-Water Partition Coefficient</b>	<b>Method</b>
Sodium bicarbonate (40 - 50%) CAS#: 144-55-8	$\log K_{oc} \sim 0$	No information available
Citric acid (40 - 50%) CAS#: 77-92-9	$\log K_{oc} = -1.16$	No information available

<b>Chemical name</b>	<b>Water solubility classification</b>	<b>Water solubility</b>	<b>Water solubility temperature °C</b>	<b>Water solubility temperature °F</b>
Sodium bicarbonate CAS#: 144-55-8	Completely soluble	95500 mg/L	20 °C	68 °F
Citric acid CAS#: 77-92-9	Completely soluble	750000 mg/L	25 °C	77 °F

**Other adverse effects**

No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste from residues/unused products**  
**Contaminated packaging**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.  
Do not reuse empty containers.

**Special instructions for disposal**

Working in a large container, cautiously add small portions of the material to cold water with agitation. Open cold water tap completely, slowly pour the reacted material to the drain. Flush system with plenty of water.

### 14. TRANSPORT INFORMATION

**U.S. 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.

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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</b>	Complies
<b>PICCS</b>	Complies
<b>TCSI</b>	Complies
<b>AICS</b>	Complies
<b>NZIoC</b>	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

#### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<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)

#### **CERCLA**

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

### US State Regulations

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#### California Proposition 65

This product does not contain any Proposition 65 chemicals

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

#### U.S. EPA Label Information

Chemical name	FIFRA	FDA
Sodium bicarbonate	180.0910	21 CFR 184.1736
Citric acid	180.0950	21 CFR 184.1033

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

#### Special Comments

None

#### Additional information

#### Global Automotive Declarable Substance List (GADSL)

Not applicable

#### NFPA and HMIS Classifications

NFPA	Health hazards - 2	Flammability - 0	Instability - 0	Physical and Chemical Properties -
HMIS	Health hazards - 2	Flammability - 0	Physical Hazards - 0	Personal protection - X - See section 8 for more information

#### 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		

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**Prepared By** Hach Product Compliance Department

**Issue Date** 11-Dec-2017

**Revision Date** 11-Dec-2017

**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**