



**Be Right™**

# SAFETY DATA SHEET

Issue Date 25-Aug-2016

Revision Date 10-Feb-2018

Version 2.2

## 1. IDENTIFICATION

### Product identifier

Product Name Ascorbic Acid

### Other means of identification

Product Code(s) 1457799-CA

Safety data sheet number M00075

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

Recommended Use Laboratory reagent

Uses advised against No information available

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

#### Initial Supplier Identifier

Hach Sales & Service LP. 3020 Gore Road, London, Ontario N5V 4T7 Canada Tel: 1-800-665-7635

#### Manufacturer Address

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

#### Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300  
CANUTEC 613-992-4624

## 2. HAZARD IDENTIFICATION

### Classification

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

### Label elements

#### **Hazard statements**

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

#### **Unknown Acute Toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity.  
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity  
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)  
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

**Other Hazards Known**  
 Not applicable.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**  
 Not applicable

**Mixture**

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>General advice</b>	No hazards which require special first aid measures. Use first aid treatment according to the nature of the injury.
<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	Wash skin with soap and water.
<b>Ingestion</b>	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

<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>	Carbon monoxide, Carbon dioxide.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

<b>WHMIS Notice</b>	Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.
<b>Personal precautions</b>	Ensure adequate ventilation.
<b><u>Environmental precautions</u></b>	
<b>Environmental precautions</b>	See Section 12 for additional ecological information.
<b><u>Methods and material for containment and cleaning up</u></b>	
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers.
<b>Prevention of secondary hazards</b>	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.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Control parameters**

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

**Legend** See section 16 for terms and abbreviations

### **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>	Solid	<b>Color</b>	White to yellow
<b>Appearance</b>	crystalline	<b>Odor threshold</b>	No data available
<b>Odor</b>	sweet		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Molecular weight</b>	No data available	
<b>pH</b>	2.3	5% Solution
<b>Melting point/freezing point</b>	192 °C / 378 °F	
<b>Boiling point / boiling range</b>	No data available	
<b>Evaporation rate</b>	Not applicable	
<b>Vapor pressure</b>	Not applicable	
<b>Vapor density (air = 1)</b>	Not applicable	
<b>Specific gravity (water = 1 / air = 1)</b>	1.65	
<b>Partition Coefficient (n-octanol/water)</b>	log K <sub>ow</sub> ~ -1.84	
<b>Soil Organic Carbon-Water Partition Coefficient</b>	log K <sub>oc</sub> ~ -0.98	
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>	No data available	
<b>Dynamic viscosity</b>	Not applicable	
<b>Kinematic viscosity</b>	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>
Ethyl alcohol	Soluble	> 1000 mg/L	25 °C / 77 °F
Glycerol	Soluble	> 1000 mg/L	25 °C / 77 °F

### Other Information

#### **Metal Corrosivity**

<b>Steel Corrosion Rate</b>	Not applicable
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**Aluminum Corrosion Rate** Not applicable

**Volatile Organic Compounds (VOC) Content**

Not applicable

**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 oxidizing agents, strong acids, and strong bases.

**Hazardous Decomposition Products**

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

## 11. TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure****Product Information**

**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.

**Aggravated Medical Conditions** None known.

**Toxicologically synergistic products** None known.

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

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

**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.

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

**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>	No information available
<b>ATEmix (inhalation-vapor)</b>	No information available
<b>ATEmix (inhalation-gas)</b>	No information available

**Ingredient Acute Toxicity Data**

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

**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 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

**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

**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

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

No data available.

**Ingredient Eye Damage/Eye Irritation Data**

No data available

**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.

Respiratory Sensitization Exposure Route If available, see data below.

**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

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 Carcinogenicity 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 Carcinogenicity Data****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

Oral Exposure Route	If available, see data below
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 Germ Cell Mutagenicity *invitro* Data**

No data available.

**Ingredient Germ Cell Mutagenicity *invitro* Data**

If available, see data below

**Product Germ Cell Mutagenicity *in vivo* 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 *in vivo* Data**

Oral Exposure Route	If available, see data below
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
Crustacea	If available, see ingredient data below
Algae	If available, see ingredient data below

**Other Information****Persistence and degradability**



**Product Biodegradability Data**

No data available.

**Ingredient Biodegradability Data****Bioaccumulation****Product Bioaccumulation Data**

No data available.

**Partition Coefficient (n-octanol/water)**log K<sub>ow</sub> ~ -1.84**Ingredient Bioaccumulation Data****Mobility****Soil Organic Carbon-Water Partition Coefficient**log K<sub>oc</sub> ~ -0.98**Water solubility**

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

**Other adverse effects**

No information available.

### 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.

### 14. TRANSPORT INFORMATION

**Transport Canada**

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

**Regulatory information**

**National Inventories**

DSL/NDSL Complies

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

**International Inventories**

TSCA Complies

EINECS/ELINCS Complies

ENCS Complies

IECSC Complies

KECL Complies

PICCS Complies

TCSI Complies

AICS Complies

NZIoC Complies

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

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

**Canada - CEPA - Mercury Containing Products**

None

**International Regulations**

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

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

None

**NFPA and HMIS Classifications**

<b>NFPA</b>	<b>Health hazards - 0</b>	<b>Flammability - 0</b>	<b>Instability - 0</b>	<b>Physical and Chemical Properties -</b>
<b>HMIS</b>	<b>Health hazards - 0</b>	<b>Flammability - 0</b>	<b>Physical Hazards - 0</b>	<b>Personal protection - X</b> - 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* RSP+ C M	Skin designation Respiratory sensitization Carcinogen mutagen	SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant

**Prepared By** Hach Product Compliance Department

**Issue Date** 25-Aug-2016

**Revision Date** 10-Feb-2018

**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.

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**End of Safety Data Sheet**