



Be Right™

# SAFETY DATA SHEET

Issue Date 27-May-2016

Revision Date 19-Oct-2017

Version 2.1

Page 1 / 16

## 1. IDENTIFICATION

### Product identifier

**Product Name** Sulfuric Acid Solution 19.2 N

### Other means of identification

**Product Code(s)** 203849

**Safety data sheet number** M00471

**UN/ID no** UN2796

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

**Recommended Use** Standard solution. Laboratory Use.

**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)

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

#### Hazards not otherwise classified (HNOC)

Data insufficient for GHS classification but significant enough for mention suggests:  
CANCER HAZARD. STRONG INORGANIC ACID MISTS CONTAINING SULFURIC ACID CAN CAUSE CANCER.  
Inhalation of low concentrations of sulfuric acid may result in airway irritation such as cough and shortness of breath; high concentrations may result in acute effects such as cough.

#### Label elements

**Signal word - Danger**

**Product Code(s)** 203849  
**Issue Date** 27-May-2016  
**Version** 2.1

**Product Name** Sulfuric Acid Solution 19.2 N  
**Revision Date** 19-Oct-2017  
**Page** 2 / 16



**Hazard statements**

H290 - May be corrosive to metals  
H314 - Causes severe skin burns and eye damage

**Precautionary statements**

P260 - Do not breathe dusts or mists  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P363 - Wash contaminated clothing before reuse  
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P405 - Store locked up  
P501 - Dispose of contents/ container to an approved waste disposal plant  
P280 - Wear 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  
P310 - Immediately call a POISON CENTER or doctor/physician  
P234 - Keep only in original container  
P390 - Absorb spillage to prevent material damage  
P406 - Store in corrosive resistant aluminum container with a resistant inliner

**Other Information**

Harmful to aquatic life

**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 #
Sulfuric acid	7664-93-9	40 - 50%	-

## 4. FIRST AID MEASURES

### Description of first aid measures

<b>General advice</b>	See section 8 for PPE that may be required during handling. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If no local exhaust use approved fume hood and/or respirator. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Remove from exposure, lie down. Immediate medical attention is required. IF IN EYES: Flush eyes for at least 15 minutes. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
<b>Skin contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.
<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately.
<b>Ingestion</b>	IF SWALLOWED: Rinse Mouth. Do NOT induce vomiting. Call a physician immediately.
<b>Self-protection of the first aider</b>	First aider: Pay attention to self-protection!. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. 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.

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

**Symptoms** See Section 11: TOXICOLOGICAL INFORMATION.

### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Dry chemical. Do NOT use water.

**Unsuitable extinguishing media** Do NOT use water.

### Flammable properties

Contact with metals may evolve flammable hydrogen gas. During a fire, irritating and highly toxic gases may be generated by thermal decomposition.

### Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

### **Hazardous combustion products**

May emit toxic and corrosive fumes.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 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

Evacuate personnel to safe areas. Remove all sources of ignition. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

#### For emergency responders

Use personal protection recommended in Section 8.

### Environmental precautions

#### Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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. Dike far ahead of liquid spill for later disposal.

#### Methods for cleaning up

Take necessary precautions in observance of pertinent physical hazards. Neutralize spill if necessary. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

#### Emergency Response Guide Number

157

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### Advice on safe handling

Absorb spillage to prevent material damage.

### Conditions for safe storage, including any incompatibilities

#### Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep/store only in original container.

#### Flammability class

Not applicable

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric acid 40 - 50%	TWA: 0.2 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>

Chemical name	Alberta OEL	British Columbia	Manitoba OEL	New Brunswick	New Foundland &
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<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	No data available	
pH	< 0.5	
Melting point/freezing point	~ -33 °C / -27 °F	Estimation based on theoretical calculation
Boiling point / boiling range	~ 109 °C / 228 °F	Estimation based on theoretical calculation
Evaporation rate	1.19 (water = 1)	Estimation based on theoretical calculation
Vapor pressure	20.477 mm Hg / 2.73 kPa at 25 °C / 77 °F	Estimation based on theoretical calculation
Vapor density (air = 1)	0.03 (air = 1)	
Specific gravity (water = 1 / air = 1)	1.535	
Partition Coefficient (n-octanol/water)	Not applicable	
Soil Organic Carbon-Water Partition Coefficient	Not applicable	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	No data available	
Kinematic viscosity	No data available	

**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	Classified as corrosive to metal according to GHS criteria
GHS Metal Corrosivity Classification	Category 1, H290
Steel Corrosion Rate	17.78 mm/yr / 0.7 in/yr
Aluminum Corrosion Rate	12.7 mm/yr / 0.5 in/yr
Bulk density	Not applicable

**Product Code(s)** 203849  
**Issue Date** 27-May-2016  
**Version** 2.1

**Product Name** Sulfuric Acid Solution 19.2 N  
**Revision Date** 19-Oct-2017  
**Page** 7 / 16

**Explosive properties**

Not classified according to GHS criteria.

**Explosion data**

Not Flammable, but reacts with most metals to form flammable hydrogen gas. During a fire, corrosive and toxic gases may be generated by thermal decomposition.

**Upper explosion limit**

No data available

**Lower explosion limit**

No data available

**Flammable properties**

Contact with metals may evolve flammable hydrogen gas. During a fire, irritating and highly toxic gases may be generated by thermal decomposition.

**Flammability Limit in Air**

**Upper flammability limit:**

No data available

**Lower flammability limit:**

No data available

**Flash point**

No data available

**Method**

No information available

**Oxidizing properties**

Not classified according to GHS criteria.

**Reactivity properties**

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

## 10. STABILITY AND REACTIVITY

**Reactivity properties**

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria

**Chemical stability**

Stable under recommended storage conditions.

**Special dangers of the product**

None reported

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

Extremes of temperature and direct sunlight. Incompatible materials.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Explosive properties**

**Product Code(s)** 203849  
**Issue Date** 27-May-2016  
**Version** 2.1

**Product Name** Sulfuric Acid Solution 19.2 N  
**Revision Date** 19-Oct-2017  
**Page** 8 / 16

Not classified according to GHS criteria. Not Flammable, but reacts with most metals to form flammable hydrogen gas. During a fire, corrosive and toxic gases may be generated by thermal decomposition.

**Upper explosion limit** No data available

**Lower explosion limit** No data available

**Autoignition temperature**

No data available

**Sensitivity to Static Discharge**

None reported

**Sensitivity to Mechanical Impact**

None reported

**11. TOXICOLOGICAL INFORMATION**

**Information on Likely Routes of Exposure**

<b>Product Information</b>	Corrosive to skin. Corrosive to eyes.
<b>Inhalation</b>	Causes burns. Corrosive by inhalation.
<b>Eye contact</b>	Corrosive to the eyes and may cause severe damage including blindness. Causes burns. Corrosive to eyes.
<b>Skin contact</b>	Cause severe skin burns and eye damage. Causes burns.
<b>Ingestion</b>	Ingestion causes burns of the upper digestive and respiratory tracts. Causes burns.
<b>Aggravated Medical Conditions</b>	Eye disorders. Skin disorders. Respiratory disorders.
<b>Toxicologically synergistic products</b>	None known.
<b>Toxicokinetics, metabolism and distribution</b>	See ingredients information below.
<b>Chemical name</b>	<b>Toxicokinetics, metabolism and distribution</b>
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	The corrosivity of sulfuric acid makes it difficult to assess its effects on metabolism. Its corrosivity is also the main contributor to acute deaths, therefore it is not classified for acute toxicity.

**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

**Acute Toxicity Estimations (ATE)**

**Ingredient Acute Toxicity Data**

<b>Oral 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
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Rat LD <sub>50</sub>	2140 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
<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	
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Rat LC <sub>50</sub>	0.510 mg/L	None reported	None reported	LOLI



**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

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Human TD <sub>Lo</sub>	0.144 mg/L	5 minutes	Lungs, Thorax, or Respiration Dyspnea	RTECS (Registry of Toxic Effects of Chemical Substances)

**Inhalation (Gas) Exposure Route**

If available, see data below

**Aspiration toxicity**

No data available

**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
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Existing human experience	Human	None reported	None reported	Corrosive to skin	HSDB (Hazardous Substances Data Bank)

**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
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Existing human experience	Human	None reported	None reported	Corrosive to eyes	HSDB (Hazardous Substances Data Bank)

**Sensitization Information**

**Product Sensitization Data**

Skin Sensitization Exposure Route  
 Respiratory Sensitization Exposure Route

No data available.  
 No data available.

**Ingredient Sensitization Data**

Skin Sensitization Exposure Route  
 Respiratory Sensitization Exposure Route

If available, see data below.  
 If available, see data below.

**Chronic Toxicity Information**

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

Product Code(s) 203849  
 Issue Date 27-May-2016  
 Version 2.1

Product Name Sulfuric Acid Solution 19.2 N  
 Revision Date 19-Oct-2017  
 Page 10 / 16

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

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Human TC <sub>Lo</sub>	.003 mg/L	168 days	Musculoskeletal Changes in teeth and supporting structures	RTECS (Registry of Toxic Effects of Chemical Substances)

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**

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sulfuric acid	7664-93-9	A2	Group 1	Known	X

**Legend**

ACGIH (American Conference of Governmental Industrial Hygienists)	A2 - Suspected Human Carcinogen
IARC (International Agency for Research on Cancer)	Group 1 - Carcinogenic to Humans
NTP (National Toxicology Program)	Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)	X - Present

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

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Cytogenetic analysis	Hamster ovary	4 mmol/L	None reported	Positive test result for mutagenicity	No information available

**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

Product Code(s) 203849  
Issue Date 27-May-2016  
Version 2.1

Product Name Sulfuric Acid Solution 19.2 N  
Revision Date 19-Oct-2017  
Page 11 / 16

**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

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Rabbit TC <sub>Lo</sub>	.02 mg/L	7 hours	<b>Specific Developmental Abnormalities</b> Musculoskeletal system	No information available

**Inhalation (Gas) Exposure Route**

If available, see data below

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Harmful to aquatic life.

**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**

No data available

**Other Information**

**Persistence and degradability**

**Product Biodegradability Data**

No data available.

**Ingredient Biodegradability Data**

No data available

**Bioaccumulation**

**Product Bioaccumulation Data**

No data available.

**Product Code(s)** 203849  
**Issue Date** 27-May-2016  
**Version** 2.1

**Product Name** Sulfuric Acid Solution 19.2 N  
**Revision Date** 19-Oct-2017  
**Page** 12 / 16

**Partition Coefficient (n-octanol/water)** Not applicable

**Ingredient Bioaccumulation Data** No data available

**Mobility**

**Product Information**

**Soil Organic Carbon-Water Partition Coefficient** Not applicable

**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**

<u>Chemical name</u>	<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water solubility temperature °C</u>	<u>Water solubility temperature °F</u>
Sulfuric acid CAS#: 7664-93-9	Soluble	> 1000 mg/L	25 °C	77 °F

**Other adverse effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national, and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D002

**Special instructions for disposal** Work in an approved fume hood. Dilute material with excess water making a weaker than 5% solution. 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. Allow cold water to run for 5 minutes to completely flush the system.

**14. TRANSPORT INFORMATION**

**U.S. DOT**

**UN/ID no** UN2796  
**Proper shipping name** Sulfuric acid, with not more than 51% acid  
**Hazard Class** 8  
**Packing Group** II  
**Emergency Response Guide Number** 157

**Product Code(s)** 203849  
**Issue Date** 27-May-2016  
**Version** 2.1

**Product Name** Sulfuric Acid Solution 19.2 N  
**Revision Date** 19-Oct-2017  
**Page** 13 / 16

**TDG**

**UN/ID no** UN2796  
**Proper shipping name** Sulfuric acid, with not more than 51% acid  
**Hazard Class** 8  
**Packing Group** II

**IATA**

**UN/ID no** UN2796  
**Proper shipping name** Sulfuric acid, with not more than 51% acid  
**Hazard Class** 8  
**Packing Group** II  
**ERG Code** 157

**IMDG**

**UN/ID no** UN2796  
**Proper shipping name** Sulfuric acid, with not more than 51% acid  
**Hazard Class** 8  
**Packing Group** II

**Additional information**

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

**15. REGULATORY INFORMATION**

**National Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**International Inventories**

**EINECS/ELINCS** Complies  
**ENCS** Complies  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**TCSI** Complies  
**AICS** Complies  
**NZIoC** Complies

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**TCSI** - Taiwan Chemical Substances Inventory  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Product Code(s) 203849  
 Issue Date 27-May-2016  
 Version 2.1

Product Name Sulfuric Acid Solution 19.2 N  
 Revision Date 19-Oct-2017  
 Page 14 / 16

Chemical name	SARA 313 - Threshold Values %
Sulfuric acid (CAS #: 7664-93-9)	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric acid 7664-93-9	1000 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)
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

**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
Sulfuric acid (40 - 50%) CAS#: 7664-93-9	Not Listed	50 gallon Export Volume (exports, transshipments and international transactions to designated countries)

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sulfuric acid 7664-93-9	X	X	X

**U.S. EPA Label Information**

Chemical name	FIFRA	FDA
Sulfuric acid	180.0910	21 CFR 184.1095

Product Code(s) 203849  
 Issue Date 27-May-2016  
 Version 2.1

Product Name Sulfuric Acid Solution 19.2 N  
 Revision Date 19-Oct-2017  
 Page 15 / 16

**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**

<b>NFPA</b>	<b>Health hazards - 3</b>	<b>Flammability - 0</b>	<b>Instability - 0</b>	<b>Physical and Chemical Properties -</b>
<b>HMIS</b>	<b>Health hazards - 3</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*	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** 27-May-2016

**Revision Date** 19-Oct-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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**Product Name** Sulfuric Acid Solution 19.2 N  
**Revision Date** 19-Oct-2017  
**Page** 16 / 16

**End of Safety Data Sheet**