

SAFETY DATA SHEET

Be Right[™]

Issue Date 21-Oct-2016 Revision Date 16-Aug-2018 Version 1.3 Page 1/15 **1. IDENTIFICATION** Product identifier **Product Name** Sulfuric Acid Standard Solution, 1.00 N Other means of identification 127032 Product Code(s) Safety data sheet number M00436 UN/ID no UN3264 Recommended use of the chemical and restrictions on use Laboratory reagent. Standard solution. **Recommended Use** Uses advised against None. None. **Restrictions on use** 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	
Serious eye damage/eye irritation	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word - Danger

1	AGHS

Product Name Sulfuric Acid Standard Solution, 1.00 N Revision Date 16-Aug-2018 Page 2 / 15



Hazard statements

H290 - May be corrosive to metals H318 - Causes serious eye damage

Precautionary statements

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
P310 - Immediately call a POISON CENTER or doctor/physician
P234 - Keep only in original container
P390 - Absorb spillage to prevent material damage

Other Hazards Known

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

<u>Mixture</u>

Chemical Family

Mixture.

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
Sulfuric acid	7664-93-9	3 - 7%	-
Glutaraldehyde	111-30-8	<0.1%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	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.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed			
Symptoms	Burning sensation.		
Indication of any immediate medica	I attention and special treatment needed		
Note to physicians	Treat symptomatically.		
	5. FIRE-FIGHTING MEASURES		
	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.		
	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 ec	uipment and emergency procedures		
Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.		
Other Information	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 containme	ent 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

Product Code(s) 127032 Product Name Sulfuric Acid Standard Solution, 1.00 N Issue Date 21-Oct-2016 Revision Date 16-Aug-2018 Version 1.3 Page 4/15 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. Conditions for safe storage, including any incompatibilities **Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric acid	TWA: 0.2 mg/m ³	TWA: 1 mg/m ³	IDLH: 15 mg/m ³
CAS#: 7664-93-9		(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³
Glutaraldehyde	Ceiling: 0.05 ppm	(vacated) Ceiling: 0.2 ppm	Ceiling: 0.2 ppm
CAS#: 111-30-8		(vacated) Ceiling: 0.8 mg/m ³	Ceiling: 0.8 mg/m ³

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	Tight sealing safety goggles.
Skin and body protection	Wear suitable protective clothing.
General Hygiene Considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. 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		Liquid				
Appearance Odor	aqueous solution None	·		Color Odor threshold	colorless No data availa	able
Property_		V	alues		Ē	Remarks • Method

Product Code(s) 127032 Product Name Sulfuric Acid Standard Solution, 1.00 N Issue Date 21-Oct-2016 Revision Date 16-Aug-2018 Version 1.3 Page 5/15 No data available Molecular weight < 0.5 pН Melting point/freezing point ~ -2 °C / 28 °F Estimation based on theoretical calculation Estimation based on theoretical Boiling point / boiling range ~ 100 °C / 212 °F calculation **Evaporation rate** 0.56 (water = 1) Vapor pressure 23.552 mm Hg / 3.14 kPa at 25 °C / 77 °F Estimation based on theoretical calculation Vapor density (air = 1) 0.62 (air = 1) Specific gravity (water = 1 / air = 1) 0.990 Partition Coefficient (n-octanol/water) Not applicable **Soil Organic Carbon-Water Partition** Not applicable Coefficient Autoignition temperature No data available **Decomposition temperature** No data available No data available **Dynamic viscosity Kinematic viscosity** No data available

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

Other Information

Metal Corrosivity

Classified as corrosive to metal according to GHS criteria

Steel Corrosion Rate Aluminum Corrosion Rate

Auminum Corrosion Rate

29.5 mm/yr / 1.16 in/yr 10.16 mm/yr / 0.4 in/yr

Volatile Organic Compounds (VOC) Content

See ingredients information below

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Sulfuric acid	7664-93-9	No data available	-
Glutaraldehyde	111-30-8	No data available	-

Explosive properties

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Upper explosion limit Lower explosion limit		No data available No data available
Flammable properties		
Flash point		No data available
Flammability Limit in Air Upper flammability limit Lower flammability limit		No data available 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	Exposure to air or moisture over prolonged periods.
In commetible metericle	

Incompatible materials Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure Product Information

Inhalation	No known effect based on information supplied.
Eye contact	Severely irritating to eyes. Causes serious eye damage. May cause burns. May cause irreversible damage to eyes.
Skin contact	May cause irritation.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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Symptoms

Redness. Burning. May cause blindness.

Aggravated Medical Conditions Eye disorders. Preexisting eye disorders. Skin disorders. Respiratory disorders. Teeth. Toxicologically synergistic None known. products Toxicokinetics, metabolism and See ingredients information below. distribution

Chemical name	Toxicokinetics, metabolism and distribution
Sulfuric acid	The corrosivity of sulfuric acid makes it difficult to assess its effects on metabolism. Its corrosivity is also the
(3 - 7%)	main contributor to acute deaths, therefore it is not classified for acute toxicity.
CAS#: 7664-93-9	

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)

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

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
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rat LD50	134 mg/kg	None reported	None reported	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Dermal Exposure Ro	ute			If available, see data below	
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rabbit LD₅₀	594 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
Inhalation (Dust/Mist) Exposure R	oute		If available, see data below	· · · · · · · · · · · · · · · · · · ·
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rat LC₅₀	0.48 mg/L	4 hours	None reported	IUCLID (The International Uniform Chemical Information Database)
Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route				If available, see data below If available, see data below	

Product Specific Target Organ Toxicity Single Exposure Data **Oral Exposure Route Dermal Exposure Route**

No data available No data available

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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

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

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

	in available, see data below						
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and		
	type	dose	time		sources for data		
Sulfuric acid	Human	0.144 mg/L	5 minutes	Lungs, Thorax, or	RTECS (Registry of Toxic		
(3 - 7%)	TDLo			Respiration	Effects of Chemical		
CAS#: 7664-93-9				Dyspnea	Substances)		
				17 11 1 1 1 1 1 1			

Inhalation (Gas) Exposure Route

If available, see data below

Aspiration toxicity

No data available

Product Skin Corrosion/Irritation Data

No data available.

Key literature references and sources for data	
Outside testing	

Ingredient Skin Corrosion/Irritation Data

If.	available,	~~~	data	holow
	avaliable	See	0ala	DEIOW

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sulfuric acid (3 - 7%) CAS#: 7664-93-9	Existing human experience	Human	None reported	None reported	Corrosive to skin	HSDB (Hazardous Substances Data Bank)
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Standard Draize Test	Human	6 mg	72 hours	Corrosive to skin	RTECS (Registry of Toxic Effects of Chemical Substances)

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 (3 - 7%) CAS#: 7664-93-9	Existing human experience	Human	None reported	None reported	Corrosive to eyes	HSDB (Hazardous Substances Data Bank)

Sensitization Information

<u>Product Sensitization Data</u> Skin Sensitization Exposure Route Respiratory Sensitization Exposure Route

Ingredient Sensitization Data Skin Sensitization Exposure Route Respiratory Sensitization Exposure Route No data available. No data available.

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

Chronic Toxicity Information

Product Specific Target Organ Toxicity Repeat Dose Data

Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route Product Name Sulfuric Acid Standard Solution, 1.00 N Revision Date 16-Aug-2018 Page 9 / 15

No data available.
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 Inhalation (Vapor) Exposure Route

nhalation (Vapor) Exposure Route				If available, see data below	
Chemical name	Endpoint	Reported	Reported Exposure Toxicological effects Key literature refere		
	type	dose	time		sources for data
Sulfuric acid	Human	.003 mg/L	168 days	Musculoskeletal	RTECS (Registry of Toxic
(3 - 7%)	TCLo	_		Changes in teeth and	Effects of Chemical
CAS#: 7664-93-9				supporting structures	Substances)
	-			16 11 L L L L L	

Inhalation (Gas) Exposure Route

Product Carcinogenicity Data

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

If available, see data below

No data available No data available No data available No data available

No data available

Ingredient Carcinogenicity Data

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sulfuric acid	7664-93-9	A2	Group 1	Known	Х
Glutaraldehyde	111-30-8	-	-	-	-

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	X - Present
Labor)	

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

	Cell Strain	Reported	Exposure	Results	Key literature
		dose	time	noouno	references and
					sources for data
Cytogenetic analysis	Hamster ovary	4 mmol/L	None reported	Positive test result for mutagenicity	No information available
-	, ,	Test Cell Strain Cytogenetic Hamster ovary	Test Cell Strain Reported dose Cytogenetic Hamster ovary 4 mmol/L	Test Cell Strain Reported dose Exposure time Cytogenetic Hamster ovary 4 mmol/L None	Test Cell Strain Reported dose Exposure time Results Cytogenetic Hamster ovary 4 mmol/L None Positive test result for

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

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······································				No data available No data available		
Ingredient Germ Cell Oral Exposure Route Dermal Exposure Ro Inhalation (Dust/Mist Inhalation (Vapor) Ex Inhalation (Gas) Exp	e ute) Exposure Ro (posure Route	oute		If available, see data below If available, see data below If available, see data below If available, see data below If available, see data below		
<u>Product Reproductive Toxicity Data</u> Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route Inhalation (Gas) Exposure Route				No data available No data available No data available No data available No data available No data available		
Ingredient Reproductive Toxicity Data Oral Exposure Route Dermal Exposure Route Inhalation (Dust/Mist) Exposure Route Inhalation (Vapor) Exposure Route				If available, see data below If available, see data below If available, see data below If available, see data below		
Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and	
	type	dose	time		sources for data	
Sulfuric acid	Rabbit	.02 mg/L	7 hours	Specific Developmental	No information available	
(3 - 7%)	TCLo			Abnormalities		

Inhalation (Gas) Exposure Route

If available, see data below

Musculoskeletal system

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product Ecological Data

CAS#: 7664-93-9

Aquatic toxicity

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

Ingredient Ecological Data

Aquatic toxicity

If available, see ingredient data below Fish Key literature references and **Chemical name** Exposure Species Endpoint Reported dose sources for data time type Glutaraldehyde 96 hours None reported 3.5 mg/L NIH (National Institutes of Health) LC50 (<0.1%) CAS#: 111-30-8 If available, see ingredient data below Crustacea **Chemical name** Exposure Species Endpoint Reported Key literature references and time dose sources for data type 48 Hours Glutaraldehyde None reported EC50 GESTIS (Information System on 0.75 mg/L (<0.1%) Hazardous Substances of the CAS#: 111-30-8 German Social Accident Insurance)

Algae

No data available

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)

Ingredient Bioaccumulation Data

Mobility

Soil Organic Carbon-Water Partition Coefficient

Water solubility

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

Not applicable

Not applicable

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methodsWaste from residues/unused
productsDispose of in accordance with local regulations. Dispose of waste in accordance with
environmental legislation.Contaminated packagingDo not reuse empty containers.US EPA Waste NumberD002Special instructions for disposalWork 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	UN3264
Proper shipping name	Corrosive Liquid, Acidic, Inorganic, N.O.S.
DOT Technical Name	Sulfuric acid, Glutaraldehyde
Hazard Class	8

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Packing Group Reportable Quantity (RQ) Description Emergency Response Guide Number	III Sulfuric acid: RQ kg= 8966.13 UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid, Glutaraldehyde), 8, III, RQ 154
TDG UN/ID no Proper shipping name Hazard Class Packing Group Description	UN3264 Corrosive Liquid, Acidic, Inorganic, N.O.S. 8 III UN3264, Corrosive liquid, acidic, inorganic, n.o.s., 8, III
IATA_ UN/ID no Proper shipping name Hazard Class Packing Group ERG Code Special precautions for user Description	UN3264 Corrosive liquid, acidic, inorganic, n.o.s.* 8 III 8L A3, A803 UN3264, Corrosive liquid, acidic, inorganic, n.o.s.*, 8, III
IMDG UN/ID no Proper shipping name Hazard Class Packing Group EmS-No Special precautions for user Description	UN3264 Corrosive liquid, acidic, inorganic, n.o.s.* 8 III F-A, S-B 223, 274 UN3264, Corrosive liquid, acidic, inorganic, n.o.s.*, 8, III

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 **FINECS/FLINCS**

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

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	-	-	Х

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	1000 lb	1000 lb	RQ 1000 lb final RQ
7664-93-9			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	U.S DEA (Drug Enforcement Administration) - List II or Essential
	Chemicals	Chemicals
Sulfuric acid	Not Listed	50 gallon Export Volume (exports,
(3 - 7%)		transshipments and international
CAS#: 7664-93-9		transactions to designated countries)

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65	
Sulfuric acid (CAS #: 7664-93-9)	Carcinogen	

WARNING: This product can expose you to chemicals including Sulfuric acid, which is known to the State of California to cause cancer.

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

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sulfuric acid 7664-93-9	Х	Х	Х
Glutaraldehyde 111-30-8	Х	Х	Х

U.S. EPA Label Information

Chemical name	FIFRA	FDA
Sulfuric acid	180.0910	21 CFR 184.1095

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

Special Comments None

Additional information

Global Automotive Declarable Substance List (GADSL)

Chemical name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thersholds
Glutaraldehyde	Declarable Substance (LR)	0.0 %
111-30-8	Prohibited Substance (LR)	

NFPA and HMIS Classifications

NFPA	Health hazards - 3	Flammability - 0	Instability - 0	Physical and Chemical Properties -
HMIS	Health hazards - 3	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

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> 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	21-Oct-2016			
Revision Date	16-Aug-2018			
Revision Note	None			

<u>Disclaimer</u>

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