

SAFETY DATA SHEET

Issue Date 16-Aug-2018

Revision Date 10-Aug-2021 Version 2.3

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1. IDENTIFICATION

<u>Product identifier</u> Product Name	COD2 Mercury-Free COD Reagent 3-150 mg/l Range
Other means of identification Product Code(s)	2565025
Safety data sheet number	M00556
UN/ID no	UN1830
Recommended use of the chemical Recommended Use Uses advised against Restrictions on use	<u>and restrictions on use</u> Laboratory Use. Determination of Chemical Oxygen Demand. Consumer use. For Laboratory Use Only.

Details of the supplier of the safety data sheet

Manufacturer Address

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

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is 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
Aquatic Acute Toxicity	Category 1
Chronic aquatic toxicity	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

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Hazard statements

H290 - May be corrosive to metals

- H314 Causes severe skin burns and eye damage
- H410 Very toxic to aquatic life with long lasting effects

Precautionary statements

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

- P280 Wear protective gloves, protective clothing, eye protection, and 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
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- 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
- P363 Wash contaminated clothing before reuse
- P405 Store locked up
- P501 Dispose of contents/ container to an approved waste disposal plant
- P273 Avoid release to the environment
- P391 Collect spillage
- P234 Keep only in original container
- P390 Absorb spillage to prevent material damage

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Family Chemical nature Mixture. Aqueous solution of inorganic acids and salts.

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Sulfuric acid	7664-93-9	80 - 90%	-
Sulfuric acid, disilver(1+) salt	10294-26-5	<1%	-
Chromic acid (H2Cr2O7)	13530-68-2	<0.1%	-

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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. If breathing has stopped, give artificial respiration. Get medical attention immediately. 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. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.
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 while removing all contaminated clothes and shoes. Get immediate medical advice/attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.
Self-protection of the first aider	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. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Most important symptoms and effe	cts, both acute and delayed
Symptoms	Burning sensation.
Indication of any immediate medica	al attention and special treatment needed
Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.
	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	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous combustion products	This material will not burn.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

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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	quipment and emergency procedures	
Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.	
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. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	
Reference to other sections	See section 8 for more information. See section 13 for more information.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handlingHandle in accordance with good industrial hygiene and safety practice. Avoid contact with
skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory
equipment. Handle product only in closed system or provide appropriate exhaust
ventilation. 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. 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

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Chemical name	ACGIH TLV	OSHA PEL	NIOSH		
Sulfuric acid	TWA: 0.2 mg/m ³ thoracic	TWA: 1 mg/m ³	IDLH: 15 mg/m ³		
CAS#: 7664-93-9	particulate matter	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³		
Sulfuric acid, disilver(1+) salt	TWA: 0.01 mg/m ³ Ag TWA: 0.01 mg/m ³ IDLH: 10 mg/m ³				
CAS#: 10294-26-5		(vacated) TWA: 0.01 mg/m ³	TWA: 0.01 mg/m ³ Ag		
Chromic acid (H2Cr2O7)	NDF	TWA: 5 µg/m³	TWA: 0.0002 mg/m ³ Cr		
CAS#: 13530-68-2		_	_		
Appropriate engineering controls					
Engineering Controls	Showers				
	Eyewash stations				
	Ventilation systems.				
Individual protection measures, suc					
Respiratory protection		eded under normal use condition	•		
	exceeded or irritation is experienced, ventilation and evacuation may be required.				
Hand Protection	Wear suitable gloves. Impervious gloves.				
Eye/face protection	Face protection shield.				
	We are suitable productions alouthing a long planned alothing. Observiced are interest				
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.				
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. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.				
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 Appearance Odor	Turbid solution Odorless	Liquid	Color Odor threshold	light orange Not applicable
Property_			<u>Values</u>	Remarks • Method
Molecular weight	:		Not applicable	
рН			< 0.5	
Melting point/free	ezing point		~ -6 °C / 21.2 °F	
Boiling point / bo	iling range		~ 105 °C / 221 °F	
Evaporation rate			0.15 (water = 1)	
Vapor pressure			1.575 mm Hg / 0.21 kPa at 25	°C / 77 °F
Relative vapor de	ensity		0.62	
Specific gravity (water = 1 / air = 1)		1.78	

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Partition Coefficient (n-octanol/water)	No data available
Soil Organic Carbon-Water Partition	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Dynamic viscosity	No data available
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	Solubility_	Solubility Temperature
None reported	No information available	No data available	No information available

Other information

Metal Corrosivity Classified as corrosive to metal according to GHS criteria **Steel Corrosion Rate Aluminum Corrosion Rate**

> 6.25 mm/yr / > 0.25 in/yr > 6.25 mm/yr / > 0.25 in/yr

Volatile Organic Compounds (VOC) Content

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Sulfuric acid	7664-93-9	No data available	-
Sulfuric acid, disilver(1+) salt	10294-26-5	No data available	-
Chromic acid (H2Cr2O7)	13530-68-2	Not applicable	-

Explosive properties

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

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10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Oxidizing agent. Acids. 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	Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.
Eye contact	Causes burns. Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	May cause irritation.
Ingestion	Causes burns. Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.
Symptoms	Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Acute toxicity

Based on available data, the classification criteria are not met

Product Acute Toxicity Data

No data available.

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Ingredient Acute Toxicity Data

No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid, disilver(1+) salt (<1%) CAS#: 10294-26-5	Rat LD ₅₀	> 5000 mg/kg	None reported	None reported	Vendor SDS
Chromic acid (H2Cr2O7) (<0.1%) CAS#: 13530-68-2	Rat LD ₅₀	80 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)

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

Skin corrosion/irritation

Causes severe burns.

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sulfuric acid (80 - 90%) CAS#: 7664-93-9	Existing human experience	Human	None reported	None reported	Corrosive to skin	HSDB (Hazardous Substances Data Bank)
Sulfuric acid, disilver(1+) salt (<1%) CAS#: 10294-26-5	Standard Draize Test	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA (The European Chemicals Agency)

Serious eye damage/irritation

Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sulfuric acid (80 - 90%)	Existing human experience	Human	None reported	None reported	Corrosive to eyes	HSDB (Hazardous Substances Data

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CAS#: 7664-93-9						Bank)
Sulfuric acid, disilver(1+) salt (<1%) CAS#: 10294-26-5	Standard Draize Test	Rabbit	180 mg	None reported	Corrosive to eyes	ECHA (The European Chemicals Agency)

Respiratory or skin sensitization

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

Product Sensitization Data

No data available.

Ingredient Sensitization Data

No data available.

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sulfuric acid, disilver(1+) salt (<1%) CAS#: 10294-26-5	in vivo Assay	Guinea pig	Not confirmed to be a skin sensitizer	ECHA (The European Chemicals Agency)

STOT - single exposure

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

Product Specific Target Organ Toxicity Single Exposure Data No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid	Human	0.144 mg/L	5 minutes	Lungs, Thorax, or	RTECS (Registry of Toxic
(80 - 90%)	TDLo			Respiration	Effects of Chemical
CAS#: 7664-93-9				Dyspnea	Substances)

STOT - repeated exposure

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

Product Specific Target Organ Toxicity Repeat Dose Data No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid, disilver(1+) salt (<1%) CAS#: 10294-26-5	Rat LD	> 2000 mg/kg	14 days	No toxicological effects observed	ECHA (The European Chemicals Agency)
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid (80 - 90%) CAS#: 7664-93-9	Human TC∟₀	0.003 mg/L	168 days	Musculoskeletal Changes in teeth and supporting structures	RTECS (Registry of Toxic Effects of Chemical Substances)

Carcinogenicity

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

Product Carcinogenicity Data

No data available.

Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Sulfuric acid	7664-93-9	A2	Group 1	Known	Х
Sulfuric acid, disilver(1+)	10294-26-5	-	-	-	-
salt					
Chromic acid (H2Cr2O7)	13530-68-2	-	Group 1	Known	Х

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)	

Germ cell mutagenicity

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

Product Germ Cell Mutagenicity invitro Data

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

No data available.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Sulfuric acid (80 - 90%) CAS#: 7664-93-9	Cytogenetic analysis	Hamster ovary	4 mmol/L	None reported	Positive test result for mutagenicity	No information available
Sulfuric acid, disilver(1+) salt (<1%) CAS#: 10294-26-5	Mutation in mammalian somatic cells	Human lymphocyte	.08 mg/L	3 hours	Negative test result for mutagenicity	ECHA (The European Chemicals Agency)

Product Germ Cell Mutagenicity invivo Data

No data available.

Ingredient Germ Cell Mutagenicity invivo Data

No data available.

Reproductive toxicity

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

Product Reproductive Toxicity Data

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sulfuric acid	Rabbit	0.02 mg/L	7 hours	Specific Developmental	RTECS (Registry of Toxic
(80 - 90%)	TCLO	_		Abnormalities	Effects of Chemical
CAS#: 7664-93-9				Musculoskeletal system	Substances)

Aspiration hazard

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

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12. ECOLOGICAL INFORMATION

0 % of the mixture consists of component(s) of unknown hazards to the aquatic

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

environment.

Unknown aquatic toxicity

Product Ecological Data

Aquatic Acute Toxicity No data available.

Aquatic Chronic Toxicity No data available.

Ingredient Ecological Data

Aquatic Acute Toxicity

No data available.

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sulfuric acid, disilver(1+) salt (<1%) CAS#: 10294-26-5	96 hours	Pimephales promelas	LC ₅₀	0.0012 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
Chromic acid (H2Cr2O7) (<0.1%) CAS#: 13530-68-2	96 hours	None reported	LC ₅₀	0.0031 mg/L	CEPA (Canadian Environmental Protection Agency)
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sulfuric acid, disilver(1+) salt (<1%) CAS#: 10294-26-5	48 Hours	Ceriodaphnia dubia	LC ₅₀	0.0045 mg/L	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)

Aquatic Chronic Toxicity

No data available.

Persistence and degradability

Product Biodegradability Data

No data available.

Bioaccumulation MATERIAL DOES NOT BIOACCUMULATE **Product Bioaccumulation Data** No data available.

Partition Coefficient (n-octanol/water)

Mobility

Soil Organic Carbon-Water Partition Coefficient

No data available

No data available

Other adverse effects No information available

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13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
US EPA Waste Number	D002
Special instructions for disposal	Dispose of material in an E.P.A. approved hazardous waste facility. Check with local

Dispose of material in an E.P.A. approved hazardous waste facility. Check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.

14. TRANSPORT INFORMATION

DOT UN/ID no Proper shipping name Transport hazard class(es) Packing Group Reportable Quantity (RQ) Description Emergency Response Guide Number	UN1830 Sulfuric acid 8 II Sulfuric acid: RQ kg= 521.52 UN1830, Sulphuric acid, 8, II, RQ 137
<u>TDG</u> UN/ID no Proper shipping name Transport hazard class(es) Packing Group Description	UN1830 Sulfuric acid 8 II UN1830, Sulphuric acid, 8, II
IATA UN number or ID number Proper shipping name Transport hazard class(es) Packing group ERG Code	UN1830 Sulphuric acid 8 II 8L
IMDG UN number or ID number Proper shipping name Transport hazard class(es) Packing Group EmS-No Marine pollutant	UN1830 Sulphuric acid 8 II F-A, S-B This material meets the definition of a marine pollutant
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.

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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 - Existing substances	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
Sulfuric acid, disilver(1+) salt (CAS #: 10294-26-5)	1.0
Chromic acid (H2Cr2O7) (CAS #: 13530-68-2)	0.1
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
Sulfuric acid, disilver(1+) salt 10294-26-5	-	Х	-	-

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Chromic acid (H2Cr2O7) 13530-68-2	-	Х	-	-
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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 Chemicals	U.S DEA (Drug Enforcement Administration) - List II or Essential Chemicals
Sulfuric acid (80 - 90%)	Not Listed	50 gallon Export Volume (exports, transshipments and international
CAS#: 7664-93-9		transactions to designated countries given in 1310.08(b))

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
Chromic acid (H2Cr2O7) (CAS #: 13530-68-2)	Carcinogen Developmental
	Female Reproductive
	Male Reproductive

WARNING: This product can expose you to chemicals including Chromic acid (H2Cr2O7), Sulfuric acid, which are known to the State of California to cause cancer or birth defects or reproductive harm. For more information, go to http://www.P65Warnings.ca.gov

IMERC: Not applicable

U.S. State Right-to-Know Regulations

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sulfuric acid 7664-93-9	Х	Х	Х
Sulfuric acid, disilver(1+) salt	Х	-	Х
10294-26-5 Chromic acid (H2Cr2O7)	Х	-	X
13530-68-2			

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

EN / AGHS

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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
Chromic acid (H2Cr2O7)	Declarable Substance (LR)	3 mg/kg
13530-68-2	Prohibited Substance (LR)	0 %
		0.1 %

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
				- 1

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH ACGIH NDF		Immediately Dangerous to Life or Health ACGIH (American Conference of Governmental Industrial Hygienists) no data			
Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION					
TWA	TWA (time-weigh	ted average)	STEL	STEL (Short Term Exposure Limit)	
MAC	Maximum Allowable Concentration		Ceiling	Ceiling Limit Value	
Х	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	1	SKN+	Skin sensitization	
RSP+ C M	Respiratory sensi Carcinogen mutagen	tization	R	Hazard Designation Reproductive toxicant	
Prepared By		Hach Product Complia	nce Department		
Issue Date		16-Aug-2018			
Revision Date		10-Aug-2021			
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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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