

SAFETY DATA SHEET

Issue Date 08-Aug-2019

Revision Date 08-Aug-2019 Version 2.2

Range

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier	
Product Name	COD2 Mercury-Free COD Reagent 200-15,000 mg/l
Safety data sheet number	M02068

Other means of identificationProduct Code(s)2834325UN/ID noUN1830

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

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

2. HAZARDS IDENTIFICATION

Classification	
Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2
Aquatic Acute Toxicity	Category 1
Chronic aquatic toxicity	Category 1

Label elements Signal word - Danger



Hazard statements

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H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction H340 - May cause genetic defects

H350 - May cause cancer

H361 - Suspected of damaging fertility or the unborn child

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/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

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P272 Contaminated work clothing should not be allowed out of the workplace
- P201 Obtain special instructions before use
- P308 + P313 IF exposed or concerned: Get medical advice/attention
- 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

<u>Mixture</u>

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
Sulfuric acid	7664-93-9	90 - 100%	-
Sulfuric acid, disilver(1+) salt	10294-26-5	<1%	-
Chromic acid (H2Cr2O7)	13530-68-2	<1%	-

4. FIRST AID MEASURES

Description of first aid measures

 General advice
 Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

 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

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	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. May cause an allergic skin reaction.
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. Itching. Rashes. Hives.
Indication of any immediate medica	I 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. May cause sensitization in susceptible persons. Treat symptomatically.
	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. Product is or contains a sensitizer. May cause sensitization by skin contact.
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.
	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.

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Personal precautions, protective equipment 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 drait	
Methods and material for containm	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

Advice on safe handling Handle 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. Remove contaminated clothing and shoes.

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

Exposure Guidelines

Chemical name	Philippines	Philippines Carcinogen	OSHA PEL	ACGIH TLV	NIOSH
Sulfuric acid	TWA: 1 mg/m ³	NDF	TWA: 1 mg/m ³	TWA: 0.2 mg/m ³	IDLH: 15 mg/m ³
(90 - 100%)			(vacated) TWA: 1	thoracic particulate	TWA: 1 mg/m ³
CAS#: 7664-93-9			mg/m³	matter	
Sulfuric acid, disilver(1+)	TWA: 0.01 mg/m ³	NDF	TWA: 0.01 mg/m ³	TWA: 0.01 mg/m ³	IDLH: 10 mg/m ³ Ag
salt			(vacated) TWA:	Ag	TWA: 0.01 mg/m ³
(<1%)			0.01 mg/m ³		Ag
CAS#: 10294-26-5			-		
Chromic acid (H2Cr2O7)	NDF	NDF	TWA: 5 µg/m³	NDF	TWA: 0.0002 mg/m ³

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(<1%) CAS#: 13530-68-2	Cr		
Legend	See section 16 for terms and abbreviations		
Appropriate engineering controls Engineering Controls	Showers Eyewash stations Ventilation systems.		
Individual protection measures, s Respiratory protection	<u>ch as personal protective equipment</u> No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.		
Hand Protection	Wear suitable gloves. Impervious gloves.		
Eye/face protection	Face protection shield.		
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 None	Liquid		Color Odor threshold	light orange No data availab	le
Property_			Values		Re	emarks • Method
Molecular weight	t		No data availal	ble		
рН			< 0.5			
Melting point/free	ezing point		~ -5 °C / 2	3 °F		
Boiling point / bo	oiling range		~ 101 °C /	214 °F		
Evaporation rate			0.13 (water = 1)		
Vapor pressure			1.125 mm Hg	/ 0.15 kPa at 25	°C / 77 °F	
Vapor density (ai	ir = 1)		0.62 (air = 1)			
Specific gravity (water = 1 / air = 1)		1.7			
Partition Coeffici	ient (n-octanol/wat	er)	Not applicable			

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Soil Organic Carbon-Water Partition	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

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

Steel Corrosion Rate Aluminum Corrosion Rate No data available No data available

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.

<u>Chemical stability</u> 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

None under normal processing.

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. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
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. Itching. Rashes. Hives.

Acute toxicity

Based on available data, the classification criteria are not met

Product Acute Toxicity Data

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No data available.

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 LD50	> 5000 mg/kg	None reported	None reported	Vendor SDS
Chromic acid (H2Cr2O7) (<1%) CAS#: 13530-68-2	Rat LD50	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)

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	44,444.00
ATEmix (dermal)	27,783.33
ATEmix (inhalation-dust/mist)	27.83
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 (90 - 100%) 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.

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						sources for data
Sulfuric acid (90 - 100%) CAS#: 7664-93-9	Existing human experience	Human	None reported	None reported	Corrosive to eyes	HSDB (Hazardous Substances Data 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

May cause sensitization by skin contact.

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%)	in vivo Assay	Guinea pig	Not confirmed to be a skin sensitizer	ECHA (The European Chemicals Agency)
CAS#: 10294-26-5				

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
(90 - 100%)	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 Reported Exposure **Toxicological effects** Key literature references and type dose time sources for data > 2000 mg/kg No toxicological effects Sulfuric acid, 14 days ECHA (The European Rat disilver(1+) salt LD observed Chemicals Agency) (<1%) CAS#: 10294-26-5 **Chemical name** Endpoint Reported Exposure **Toxicological effects** Key literature references and type dose time sources for data Sulfuric acid Human 0.003 mg/L 168 days Musculoskeletal RTECS (Registry of Toxic (90 - 100%)TCLO Changes in teeth and Effects of Chemical CAS#: 7664-93-9 Substances) supporting structures

Carcinogenicity

Classification based on data available for ingredients. Contains a known or suspected carcinogen.

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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+) salt	10294-26-5	-	-	-	-
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

Classification based on data available for ingredients. Contains a known or suspected mutagen. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

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 (90 - 100%) 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 Iymphocyte	.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

Classification based on data available for ingredients. Contains a known or suspected reproductive toxin. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Product Reproductive Toxicity Data

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Chemical nam	e Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data

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Sulfuric acid	Rabbit	0.02 mg/L	7 hours	Specific Developmental	RTECS (Registry of Toxic
(90 - 100%)	I CLO			Abnormalities	Effects of Chemical
CAS#: 7664-93-9				Musculoskeletal system	Substances)

Aspiration hazard

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

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) (<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

Product Bioaccumulation Data No data available.

Partition Coefficient (n-octanol/water)

Not applicable

Mobility

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Soil Organic Carbon-Water Partition Coefficient

Not applicable

Other adverse effects

Contains a substance with an endocrine-disrupting potential.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues/unused	Dispose of in accordance with local regulations. Dispose of waste in accordance with
products	environmental legislation.

Contaminated packaging

Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT UN/ID no Proper shipping name Hazard Class Packing Group Emergency Response Guide Number	UN1830 Sulphuric Acid 8 II 137
<u>TDG</u> UN/ID no Proper shipping name Hazard Class Packing Group	UN1830 Sulphuric Acid 8 II
IATA UN/ID no Proper shipping name Hazard Class Packing Group ERG Code	UN1830 Sulphuric Acid 8 II 137
IMDG UN/ID no Proper shipping name Hazard Class Packing Group Marine pollutant	UN1830 Sulphuric Acid 8 II This material meets the definition of a marine pollutant

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

Philippines Laws and Regulations

Department Administrative Order (DAO): Rules and Procedures for the Safety DataSheet (SDS). Labeling Requirements and Hazards Classification under DENRAdministrative Order No. 29. Series of 1992 of Republic Act 6969 for the Adoption andImplementation of the Globally Harmonized System (GHS).

PICCS - Philippines Inventory of Chemicals and Chemical Substances

PICCS	Complies
International Inventories TSCA DSL/NDSL EINECS/ELINCS ENCS IECSC KECL TCSI AICS NZIOC	Complies Complies Complies Complies Complies Complies Complies Complies

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

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

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

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

Philippines

Chemical name	CAS No.	Philippines - Priority Chemical List	Philippines - Substances Subject to Chemical Control Orders (CCO)
Sulfuric acid	7664-93-9	-	-
Sulfuric acid, disilver(1+) salt	10294-26-5	-	-
Chromic acid (H2Cr2O7)	13530-68-2	X	-

Wastes Management

Dispose of in accordance with federal, state and local regulations

Basel Convention Codes

Chemical name	CAS No.	ANNEX I	ANNEX III
Sulfuric acid	7664-93-9 Y34 (solid or solution, list		-
		under Acidic solutions or	
		acids in solid form)	
Sulfuric acid, disilver(1+) salt	10294-26-5	-	-
Chromic acid (H2Cr2O7)	13530-68-2	Y21	-

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

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16. OTHER INFORMATION

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

NIOSH IDLH ACGIH NDF		Immediately Dangerous ACGIH (American Conf no data		ental Industrial Hygienists)			
Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION							
TWA	TWA (time-weight	ted average)	STEL	STEL (Short Term Exposure Limit)			
MAC	Maximum Allowal	ble 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* RSP+ C M	Skin designation Respiratory sensi Carcinogen mutagen	tization	SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant			
Prepared By		Hach Product Complian	ce Department				
Issue Date		08-Aug-2019					
Revision Date		08-Aug-2019					
Revision Note							

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