

SAFETY DATA SHEET

Issue Date 18-May-2021

Revision Date 10-Aug-2021 Version 3.3

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1. IDENTIFICATION

<u>Product identifier</u> Product Name	SP 510 [™] Hardness Monitor Indicator Solution for 5 to 100 mg/L Hardness
Other means of identification	

Product Code(s) 2769249

Safety data sheet number M00622

Recommended use of the chemical and restrictions on use

Recommended UseHardness determination. Water Analysis.Uses advised againstNone.Restrictions on useNone.

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)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word Warning



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Hazard statements H315 - Causes skin irritation H319 - Causes serious eye irritation

Precautionary statements

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs: Get medical attention
P362 - Take off contaminated clothing and wash before reuse
P280 - Wear protective gloves, protective clothing, eye protection, and 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
P337 + P313 - If eye irritation persists: Get medical attention

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Not applicable

Mixture

	Range	
Propanoic acid 79-09	-4 1 - 5%	-

4. FIRST AID MEASURES

	4. FINST AID MEASURES	
Description of first aid measures		
General advice	Show this safety data sheet to the doctor in attendance.	
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. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Do not rub affected area.	
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	al attention and special treatment needed	
Note to physicians	Treat symptomatically.	

5. FIRE-FIGHTING MEASURES

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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. 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.	
Personal precautions, protective e	quipment 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 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. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.	
Conditions for safe storage, includ	ing any incompatibilities	
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.	

Storage ConditionsKeep containers tightly closed in a dry, cool and well-ventilated place.Flammability classNot applicable

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	
Propanoic acid	TWA: 10 ppm	(vacated) TWA: 10 ppm	TWA: 10 ppm	
CAS#: 79-09-4		(vacated) TWA: 30 mg/m ³	TWA: 30 mg/m ³	
			STEL: 15 ppm	
			STEL: 45 mg/m ³	
Appropriate engineering controls				
Engineering Controls	Showers			
	Eyewash stations			
	Ventilation systems.			
Individual protoction magazines	h as naroonal protoctive and	nmont		
Individual protection measures, suc			na lf avnasura limita ara	
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. Impervious gloves.			
Eye/face protection	If splashes are likely to occur,	wear safety glasses with side-s	shields.	
Skin and body protection	Wear suitable protective clothi	ng. Long sleeved clothing.		
General Hygiene Considerations	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skip, even or clothing			
	product. Avoid contact with skin, eyes or clothing.			
Environmental exposure controls	s 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.			
		-		
0				

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Odor	aqueous solution Acidic	Liquid	-	Color Odor threshold	dark red No data avai	lable
Property_			Values			Remarks • Method
Molecular weight	:		No data available			
рН			2.9			@ 20 °C
Melting point/free	ezing point		~ -1 °C / 30.2	2°F		
Boiling point / bo	iling range		100 °C / 212	°F		
Evaporation rate			1 (water = 1)			
Vapor pressure			23.702 mm Hg /	3.16 kPa at 2	5 °C / 77 °F	

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0.62
1.006
Not applicable
Not applicable
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
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

Other information

Metal Corrosivity

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

Volatile Organic Compounds (VOC) Content

See ingredients information below

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Propanoic acid	79-09-4	No data available	Х

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:	No data available
Lower flammability limit:	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

None known based on information supplied.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components).
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Symptoms	Redness. May cause redness and tearing of the eyes.

Acute toxicity

Based on available data, the classification criteria are not met

Product Acute Toxicity Data No data available.

Ingredient Acute Toxicity Data

No data available.

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Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Propanoic acid (1 - 5%)	Rat LD50	2600 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information
CAS#: 79-09-4			•		Database)

Unknown Acute Toxicity

0.01% 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

Classification based on data available for ingredients. Irritating to skin.

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
Propanoic acid (1 - 5%) CAS#: 79-09-4	Open Irritation Test	Rabbit	495 mg	None reported	Corrosive to skin	RTECS (Registry of Toxic Effects of Chemical Substances)

Serious eye damage/irritation

Classification based on data available for ingredients. Irritating 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
Propanoic acid (1 - 5%)	Standard Draize Test	Rabbit	0.99 mg	None reported	Corrosive to eyes	RTECS (Registry of Toxic Effects of
CAS#: 79-09-4	1001			roponou		Chemical Substances)

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

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Propanoic acid (1 - 5%)	OECD Test No. 406: Skin	Guinea pig	Not confirmed to be a skin sensitizer	IUCLID (The International Uniform Chemical Information Database)
CAS#: 79-09-4	Sensitization			

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.

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.

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
Propanoic acid	79-09-4	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of	Does not apply
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
Propanoic acid (1 - 5%) CAS#: 79-09-4	Mutation in microorganisms	Salmonella typhimurium	6.667 mg/plate	None reported	Negative test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical
						Substances)

Product Germ Cell Mutagenicity invivo Data

No data available.

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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.

Aspiration hazard

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown aquatic toxicity

 $0.01\ \%$ of the mixture consists of component(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
Propanoic acid (1 - 5%)	96 hours	Oncorhynchus mykiss	LC ₅₀	51.0 mg/L	IUCLID (The International Uniform Chemical Information
CAS#: 79-09-4 Chemical name	Exposure time	Species	Endpoint type	Reported dose	Database) Key literature references and sources for data
Propanoic acid (1 - 5%) CAS#: 79-09-4	48 Hours	Daphnia magna	EC ₅₀	45.8 mg/L	IUCLID (The International Uniform Chemical Information Database)

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.

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Partition Coefficient (n-octanol/water)

Mobility

Soil Organic Carbon-Water Partition Coefficient

Other adverse effects No information available Product Name SP 510[™] Hardness Monitor Indicator Solution for 5 to 100 mg/L Hardness Revision Date 10-Aug-2021 Page 10 / 13

Not applicable

Not applicable

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.
Special instructions for disposal	Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an

cial instructions for disposal Dilute to 3 to 5 times the volume with cold water. 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.

14. TRANSPORT INFORMATION			
DOT	Not regulated		
TDG	Not regulated		
IATA	Not regulated		
IMDG	Not regulated		
Note:	No special precautions necessary.		

Additional information

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

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

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

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

15. REGULATORY INFORMATION

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	Does not comply
TCSI	Complies

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Complies		

Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

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- **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

AICS

NZIOC

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
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
Propanoic acid 79-09-4	5000 lb	-	-	Х

<u>CERCLA</u>

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)
Propanoic acid	5000 lb	-	RQ 5000 lb final RQ
79-09-4			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

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
Propanoic acid	Х	X	Х
79-09-4			

U.S. EPA Label Information

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Chemical name	FIFRA	FDA
Propanoic acid	180.0940	21 CFR 184.1081

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

NFPA	Health hazards - 2	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 2	Flammability - 0	Physical hazards - 0	Personal protection - X - I

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

NIOSH IDLH ACGIH NDF		Immediately Dangerous ACGIH (American Confe no data	ental Industrial Hygienists)	
Legend - Sectio	n 8: EXPOSURE C	ONTROLS/PERSONAL P	ROTECTION	
TWA	TWA (time-weigh	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		18-May-2021		
Revision Date		10-Aug-2021		
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.

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End of Safety Data Sheet