SAFETY DATA SHEET



This safety data sheet complies with the requirements of: GB/T 17519-2013 and GB/T 16483-2008

Issue Date 26-05-2017

Version 3.6

Revision Date 12-Aug-2022 Page 1 / 13

Section 1: PRODUCT AND COMPANY IDENTIFICATION

<u>Product identifier</u> Product Name	Rochelle Salt - PVA Reagent
Other means of identification	

Other means of identificationProduct Code(s)2199449Safety data sheet numberM00580

Alternate CAS Number

Not applicable

Other Information Not applicable

Details of the supplier of the safety data sheet

Supplier Address

HACH CHINA Floor 23, Saite Building, Jianguomenwai Street No.22, Beijing 100004 Tel: 400-686-8899, 800-840-6026

Manufacturer Address

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

Emergency Telephone - China

400-007-0792 - 24 Hour Service

Recommended use of the chemical and restrictions on use

Recommended Use	Laboratory reagent. Determination of ammonium nitrogen.
Uses advised against	None.
Restrictions on use	None.

Section 2: HAZARDS IDENTIFICATION

Appearance aqueous solution	Physical state Liquid.	Odor Odorless

GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Hazard statements

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Product Name Rochelle Salt - PVA Reagent Revision Date 12-Aug-2022 Page 2/13

Physical Hazards

Not applicable.

Health hazards

Immediate Health Effects: Not applicable. Chronic effects: Not applicable.

Environmental hazards

This material is a water pollutant. Keep out of drains, sewers, ditches and waterways. Minimize use of water to prevent environmental contamination. Hazardous to the ozone layer.

Other hazards which do not result in

classification Not applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)					
Chemical name Percent Range Formula Molecular weight CAS No EC No				EC No	
Polyvinyl alcohol	<1%	(C2H4O)x	44.0	9002-89-5	-
Propanoic acid	<1%	C3H6O2	74.07	79-09-4	201-176-3

Section 4: FIRST AID MEASURES

Description of necessary first aid measures

General advice	No hazards which require special first aid measures. Use first aid treatment according to the nature of the injury.
Inhalation	Remove to fresh air.
Skin contact	In the case of skin irritation or allergic reactions see a physician. Wash skin with soap and water.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water.
For emergency responders Self-protection of the first aider	No information available.
Most important symptoms/effects,	acute and delayed_
Symptoms	No information available.
Indication of immediate medical att	ention and special treatment needed, if necessary

Indication of immediate medical attention and special treatment needed, if necessary Note to physicians

Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Product Code(s) 2199449 Issue Date 26-05-2017 Version 3.6	Product Name Rochelle Salt - PVA Reagent Revision Date 12-Aug-2022 Page 3 / 13
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Product itself does not burn.
Unsuitable Extinguishing Media Specific hazards arising from the ch	No information available
Specific hazards arising from the chemical	No information available.
Explosive properties Not classified according to GHS criteri	a.
Hazardous combustion products	No information available.
Specific/special fire-fighting measures	res No information available.
Special protective equipment and p Special protective equipment for fire-fighters	recautions for fire-fighters
Sect	ion 6: ACCIDENTAL RELEASE MEASURES
<u>Personal precautions, protective eq</u> Personal precautions	uipment and emergency procedures Ensure adequate ventilation.
Personal precautions For emergency responders Environmental precautions	Ensure adequate ventilation. Use personal protective equipment as required.
Personal precautions For emergency responders <u>Environmental precautions</u> Environmental precautions	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information.
Personal precautions For emergency responders Environmental precautions	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information.
Personal precautions For emergency responders <u>Environmental precautions</u> Environmental precautions Methods and material for containment	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information.
Personal precautions For emergency responders <u>Environmental precautions</u> Environmental precautions <u>Methods and material for containment</u> Methods for containment	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information. <u>ent and cleaning up</u> Prevent further leakage or spillage if safe to do so.
Personal precautions For emergency responders <u>Environmental precautions</u> Environmental precautions <u>Methods and material for containment</u> Methods for containment Methods for cleaning up	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information. <u>ent and cleaning up</u> Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.
Personal precautions For emergency responders <u>Environmental precautions</u> Environmental precautions <u>Methods and material for containment</u> Methods for containment Methods for cleaning up Prevention of secondary hazards Reference to other sections	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information. Ent and cleaning up Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers. Clean contaminated objects and areas thoroughly observing environmental regulations. See section 8 for more information.
Personal precautions For emergency responders <u>Environmental precautions</u> Environmental precautions <u>Methods and material for containment</u> Methods for containment Methods for cleaning up Prevention of secondary hazards Reference to other sections	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information. Ent and cleaning up Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers. Clean contaminated objects and areas thoroughly observing environmental regulations. See section 8 for more information. See section 13 for more information. Section 7: HANDLING AND STORAGE
Personal precautions For emergency responders Environmental precautions Environmental precautions Methods and material for containment Methods for containment Methods for cleaning up Prevention of secondary hazards Reference to other sections Preventive measures for safe handl	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information. ent and cleaning up Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers. Clean contaminated objects and areas thoroughly observing environmental regulations. See section 8 for more information. See section 13 for more information. Section 7: HANDLING AND STORAGE ing
Personal precautions For emergency responders Environmental precautions Environmental precautions Methods and material for containment Methods for containment Methods for cleaning up Prevention of secondary hazards Reference to other sections Preventive measures for safe handl Advice on safe handling Precautions for safe handling	Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional ecological information. ent and cleaning up Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers. Clean contaminated objects and areas thoroughly observing environmental regulations. See section 8 for more information. See section 13 for more information. Section 7: HANDLING AND STORAGE ing Handle in accordance with good industrial hygiene and safety practice.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Exposure Limits

Chemical name	CAS No	Percent Range	China	ACGIH TLV	OSHA PEL
Polyvinyl alcohol	9002-89-5	<1%	NDF	NDF	NDF
Propanoic acid	79-09-4	<1%	TWA: 30 mg/m ³	TWA: 10 ppm	(vacated) TWA: 10 ppm (vacated) TWA: 30 mg/m ³

Legend	See section 16 for terms and abbreviations		
<u>Appropriate engineering controls</u> Engineering Controls	Showers Eyewash stations Ventilation systems. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.		
Individual protection measures, su	ch 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. Ensure adequate ventilation.		
Hand Protection	Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1:2016.		
Eye/face protection	Wear safety glasses with side shields (or goggles).		
Skin and body protection	No special protective equipment required. Avoid contact with eyes, skin and clothing.		
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.		
Environmental exposure controls Thermal hazards	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. None under normal processing.		

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Odor	aqueous solution Odorless	Liquid		Color Odor threshold	colorless No data avai	lable
Property_			Values			Remarks • Method
Molecular weight			No data availab	le		
рН			6			@ 20 °C

Product Code(s) 2199449 Issue Date 26-05-2017 Version 3.6	Product Name Rochelle Salt - PVA Reagent Revision Date 12-Aug-2022 Page 5 / 13
Melting point/freezing point	0 °C / 32 °F
Boiling point / boiling range	96 °C / 204.8 °F
Evaporation rate	1 (water = 1)
Vapor pressure	17.477 mm Hg / 2.33 kPa at 20 °C / 68 °F
Relative vapor density	0.62
Specific gravity (water = 1 / air = 1)	1.01
Partition Coefficient (n-octanol/water)	Not applicable
Soil Organic Carbon-Water Partition	Not applicable
Autoignition temperature	No data available
Decomposition temperature	No data available
Dynamic viscosity	1 cP (mPa s) at 20 °C / 68 °F
Kinematic viscosity	0.99 cSt (mm²/s) at 20 °C / 68 °F

Solubility(ies)

Water solubility

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

Solubility in other solvents

Acid	Soluble	> 1000 mg/L	25 °C / 77 °F
Most Polar Organic Solvents	Soluble	> 1000 mg/L	25 °C / 77 °F

Other information

Metal Corrosivity

Steel Corrosion Rate	0.18 mm/yr / 0.01 in/yr
Aluminum Corrosion Rate	0.28 mm/yr / 0.01 in/yr

Volatile Organic Compounds (VOC) Content

See ingredients information below

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Polyvinyl alcohol	9002-89-5	No data available	-
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

Flammability Limit in Air Upper flammability limit: Lower flammability limit:

Oxidizing properties

Bulk density

Product NameRochelle Salt - PVA ReagentRevision Date12-Aug-2022Page6 / 13

No data available

No data available No data available

No data available.

No data available

Section 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.

<u>Hazardous polymerization</u> None under normal processing.

Conditions to avoid Conditions to avoid

None known based on information supplied.

Incompatible materials Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	No known effect based on information supplied.
Eye contact	No known effect based on information supplied.
Skin contact	No known effect based on information supplied.
Ingestion	No known effect based on information supplied.
Symptoms	No information available.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

Product Name Rochelle Salt - PVA Reagent Revision Date 12-Aug-2022 Page 7 / 13

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
Polyvinyl alcohol (<1%) CAS#: 9002-89-5	Rat LD50	> 20000 mg/kg	None reported	None reported	RTECS
Propanoic acid (<1%) CAS#: 79-09-4	Rat LD₅₀	2600 mg/kg	None reported	None reported	IUCLID

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

0% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

0% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

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

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

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%) CAS#: 79-09-4	Open Irritation Test	Rabbit	495 mg	None reported	Corrosive to skin	RTECS

Serious eye damage/eye irritation

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

Mixture

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%) CAS#: 79-09-4	Standard Draize Test	Rabbit	0.99 mg	None reported	Corrosive to eyes	RTECS

Respiratory or skin sensitization

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

Mixture

No data available.

Ingredient Sensitization Data

No data available.

Chemical name	Test method	Species	Results	Key literature references and sources for data
Propanoic acid (<1%) CAS#: 79-09-4	OECD Test No. 406: Skin Sensitization	Guinea pig	Not confirmed to be a skin sensitizer	IUCLID

STOT - single exposure

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

Mixture

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.

Mixture

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.

Mixture

No data available.

Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Polyvinyl alcohol	9002-89-5	-	Group 3	-	-
Propanoic acid	79-09-4	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 3 - Not classifiable as a human
	carcinogen
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

Mutagenicity

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

Mixture invitro Data No data available.

Substance 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%) CAS#: 79-09-4	Mutation in microorganisms	Salmonella typhimurium	6.667 mg/plate	None reported	Negative	RTECS

Mixture invivo Data

No data available.

Substance invivo Data No data available.

Reproductive toxicity

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

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Reproductive Toxicity Data

No data available.

Aspiration hazard

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

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

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
Polyvinyl alcohol (<1%) CAS#: 9002-89-5	96 hours	Danio rerio	LC50	> 5000 mg/L	Vendor SDS
Propanoic acid (<1%) CAS#: 79-09-4	96 hours	Oncorhynchus mykiss	LC ₅₀	51.0 mg/L	IUCLID
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Propanoic acid (<1%) CAS#: 79-09-4	48 Hours	Daphnia magna	ÉC ₅₀	45.8 mg/L	IUCLID
Aquatic Chronic Tox	icity		•	·	

No data available.

Persistence and degradability

Product Biodegradability Data No data available.

Product Bioaccumulation Data No data available.

Partition Coefficient (n-octanol/water) Not applicable

Mobility

Soil Organic Carbon-Water Partition Coefficient Not applicable

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.		
Contaminated packaging	Do not reuse empty containers.	
Section 14: TRANSPORTATION INFORMATION		
DOT	Not regulated	
IMDG	Not regulated	

Additional information

ΙΑΤΑ

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:

Not regulated

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

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

Section 15: REGULATORY INFORMATION

National Regulations

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Catalogue of occupational hazard factors: Not applicable. Catalogue of occupational diseases: Not applicable. Product Name Rochelle Salt - PVA Reagent Revision Date 12-Aug-2022 Page 10 / 13

Not applicable.

Chemical name	Category
Propanoic acid	Chemical hazards

Regulations on the Control over Safety of Hazardous Chemicals

Inventory of hazardous chemicals Not applicable.

Chemical name	Inventory of hazardous chemicals
Propanoic acid	Listed

GB 18218-2009 Identification of major hazard installations for dangerous chemicals Not applicable.

List of hazardous chemicals under priority management Not applicable.

Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used Inventory of highly toxic goods Not applicable.

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

List of toxic chemicals severely restricted for import and export in China

Measures for the Environmental Management of New Chemical Substances IECSC Complies IECSC - China Inventory of Existing Chemical Substances

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
KECL - Existing substances	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIOC	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

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

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

Section 16: OTHER INFORMATION

Prepared By

Hach Product Compliance Department

26-05-2017	

Revision Date12-Aug-2022

Revision Note

Reference Sources for Section 11 See Section 11: TOXICOLOGICAL INFORMATION

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

ACGIH ATSDR CCRIS CDC CEPA CICAD ECHA EEA EPA ERMA	ACGIH (American Conference of Governmental Industrial Hygienists) ATSDR (Agency for Toxic Substances and Disease Registry) CCRIS (Chemical Carcinogenesis Research Information System) CDC (Center for Disease Control) CEPA (Canadian Environmental Protection Agency) CICAD (Concise International Chemical Assessment Documents) ECHA (The European Chemicals Agency) EEA (European Environment Agency) EPA (Environmental Protection Agency) ERMA (New Zealands Environmental Risk Management Authority)
ECOSARS	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™
FDA	FDA (Food & Drug Administration)
GESTIS	GESTIS (Information System on Hazardous Substances of the German Social Accident Insurance)
HSDB	HSDB (Hazardous Substances Data Bank)
INERIS	INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM	IPCS INCHEM (International Programme on Chemical Safety)
IUCLID	IUCLID (The International Uniform Chemical Information Database)
NITE	Japan National Institute of Technology and Evaluation (NITE)
NIH	NIH (National Institutes of Health)
NIOSH	NIOSH (National Institute for Occupational Safety and Health)
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)
NDF	no data
NICNAS NIOSH IDLH	Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) Immediately Dangerous to Life or Health
OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEEN	PEEN (Pan European Ecological Network)
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS	SIDS (Screening Information Dataset) for High Volume Chemicals
SYKE	The Finnish Environment Institute (SYKE)
USDA	USDA (United States Department of Agriculture)
USDC	USDC (United States Department of Commerce)
WHO	WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN* RSP+ C M	Skin designation Respiratory sensitization Carcinogen mutagen	SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant

Product Name Rochelle Salt - PVA Reagent Revision Date 12-Aug-2022 Page 13 / 13

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. HACH COMPANY©2022

End of Safety Data Sheet