SAFETY DATA SHEET

Revision Date: 18-June-2018
Revision 1

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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

Product Identifier

Product Name	pH Electrode Cleaning Solution
Product Number(s)	00653-06
Pure Substance/mixture	Mixture

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use	Use as laboratory reagent
Uses advised against	No information available

Manufacture/Supplier

Cole-Parmer™
North America
625 East Bunker Court
Vernon Hills, IL
60061 USA
Tel: 1-800-323-4340

E-mail address	info@coleparmer.com
Made In	USA
Emergency Telephone	888-358-4717 8:00 am – 6:00 pm CST

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Met. Corr.1 H290 May be corrosive to metals.
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Label Elements **Emergency Overview**

Signal Word: Danger

Hazard Statements

H290 May be corrosive to metals.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.

GHS08 GHS05

Appearance Clear to light yellow **Physical State** Liquid **Odor** Slight

Safety data sheet available upon request.

Precautionary Statements

Do not handle until all safety information has been read and understood.

Prevention
P234 Keep only in original container.
P261 Avoid breathing mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves and eye protection.
P285 In case of inadequate ventilation wear respiratory protection.
P302+P352 If on skin: Wash with plenty of water.
P304+P341 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P342+P311 If experiencing respiratory symptoms: Call a poison center/doctor.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P406 Store in corrosive resistant container with a resistant inner liner.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Storage
Store locked up

Disposal
Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)
No information available

Other Information
No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %	Trade Secret
Water	7732-18-5	>99 %	*
Pepsin  Resp. Sens. 1, H334 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	9001-75-6	<1 %	*
Hydrochloric Acid  Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318 Acute Tox. 4, H302; STOT SE 3, H335	7647-01-0	<1 %	*
Methylparaben	99-76-3	<1 %	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact:
Immediately wash with water and soap and rinse thoroughly. If skin irritation or rash occurs: Get medical advice/attention.
After eye contact:
Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing:
Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.
Most important symptoms and effects, both acute and delayed:
Asthma attacks
Breathing difficulty
Coughing
Allergic reactions
Gastric or intestinal disorders when ingested.
Danger: Danger of impaired breathing.

Indication of any immediate medical attention and special treatment needed:
Contains Pepsin A. May produce an allergic reaction. Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible. Treat skin and mucous membrane with antihistamine and corticoid preparations.
In cases of irritation to the lungs, initial treatment with cortical steroid inhalants. If necessary oxygen respiration treatment.
Medical supervision for at least 48 hours.
Later observation for pneumonia and pulmonary edema.
If medical advice is needed, have product container or label at hand.

Most important symptoms and effects, both acute and delayed

Most important symptoms/effects	No information available

Indication of any immediate medical attention and special treatment needed

Notes to Physician	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
No information available

Specific Hazards Arising from the Chemical
No information available

Explosion Data
Sensitivity to Mechanical Impact - None
Sensitivity to Static Discharge – None

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions	Use personal protective equipment. Refer to Section 8. Evacuate personnel to safe areas.
Environmental Precautions	Beware of vapors accumulating to form explosives concentrations. Vapors can accumulate in low areas.

Method and Material for Containment and Cleaning Up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling	To avoid risks to human health and the environment, comply with the instructions for use. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray Ensure adequate ventilation, especially in confined areas.

Conditions for Safe Storage, Including any Incompatibilities

Storage	Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from direct sunlight.
Incompatible Products	No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric Acid 7647-01-0	Ceiling: 2 ppm	PEL (USA) Ceiling limit value: 7 mg/m³, 5 ppm REL (USA) Ceiling limit value: 7 mg/m³, 5 ppm TLV (USA) Ceiling limit value: 2.98 mg/m³, 2 ppm EL (Canada) Ceiling limit value: 2 ppm EV (Canada) Ceiling limit value: 2 ppm LMPE (Mexico) Ceiling limit value: 2 ppm A4	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m³

Appropriate Engineering Controls

Engineering Measures: Showers, Eyewash stations, Ventilation systems

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols.

Engineering controls: Provide adequate ventilation.

Breathing equipment:

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present.

Protection of hands:

Protective gloves

Material of gloves

Nitrile rubber, NBR
Natural rubber, NR
Neoprene gloves
Butyl rubber, BR
Fluorocarbon rubber (Viton)

Eye protection:

Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment

No relevant information available.

Risk management measures No relevant information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties.

Physical State	Liquid
Appearance	Clear to light yellow
Odor	Slight
Odor Threshold	No information available
pH Range	0.0 – 2.7

Property	Values	Remarks * Method
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point (High in °C)	N/A	

Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor Density	No information available
Specific Gravity	No information available
Water Solubility	soluble
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition Temperature	
Decomposition Temperature	No information available
Kinematic Viscosity	No information available
Dynamic Viscosity	No information available
Explosive Properties	No information available
Oxidizing Properties	No information available

Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity
No relevant information available.

Chemical Stability
Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.

Possibility of Hazardous Reactions
Reacts with alkali (lyes).
Corrosive action on metals.
Reacts with strong oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.

Conditions to Avoid
Extremes of temperature and direct sunlight

Incompatible Materials
Alkalis

Hazardous Decomposition Products
Possible in traces.

Under fire conditions only:
Hydrogen chloride (HCl)
Carbon monoxide and carbon dioxide

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No information available
Eye Contact	No information available

Skin Contact No information available
Ingestion No information available

Component		LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	7732-18-5	LD50 > 90 ml/kg (Rat)	-	-
Hydrochloric Acid	7647-01-0	LD50 238-277 mg/kg (Rat)	LD50 > 5010 mg/kg (Rabbit)	LC50 = 1.68 mg/L (Rat) 1 hour
Methylparaben	99-76-3	LD50 = 2100 mg/kg (Rat)	-	-

Information on Toxicological Effects
Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Sensitization Based on available data, the classification criteria are not met.
Mutagenic Effects Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive Effects Based on available data, the classification criteria are not met.
STOT – single exposure Based on available data, the classification criteria are not met.
STOT – repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.

Numerical measures of toxicity – Product Information
The following values are calculated based on chapter 3.1 of the GHS document.
ATEmix (inhalation -dust/mist) 125.2 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity
0.5% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Component		Freshwater Algae	Freshwater Fish	Water Flea
Hydrochloric Acid	7647-01-0	-	LC50: = 282 mg/L, 96h static (Gambusia affinis)	-

Persistence and Degradability
No information available

Bioaccumulation/Accumulation
No information available

Mobility
No information available

Other adverse effects
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects No relevant information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
Contaminated Packaging Improper disposal or reuse of this container may be dangerous and illegal.

Component	CAWAST
Hydrochloric Acid 7647-01-0	Toxic Corrosive Reactive

14. TRANSPORT INFORMATION

DOT - Not Regulated
ICAO - Not Regulated
IATA - Not Regulated
IMDG/IMO - Not Regulated

15. REGULATORY INFORMATION

International Inventories

USINV/TSCA	All ingredients are listed.
CANINV	All ingredients are listed.
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

USINV/TSCA – United States Toxic Substances Control Act Section 8(b) Inventory
CANINV/DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substance List
EINECS/ELINCS – European Inventory of Existing Commercial Chemical Substance / EU List of Notified Chemical Substances
ENCS – Japanese Existing and New Chemical Substances
IECSC – Chinese Inventory of Existing Chemical Substances
KECL – Korean Existing and Evaluated Chemical Substances
PICCS – Philippines Inventory of Chemicals and Chemical Substances
AICS – Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA
Section 302 (extremely hazardous substances):
None of the ingredients are listed.
Section 355 (extremely hazardous substances):
7647-01-0 hydrochloric acid
Section 313 (Specific toxic chemical listings):
None of the ingredients are listed.

CWA (Clean Water Act)

Component	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substance
Hydrochloric Acid 7647-01-0	5000 lbs	-	-	X

CERCLA
This material, as supplied, contains one or more substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Component		Hazardous Substances RQs	CERCLA EHS RQs	RQ
Hydrochloric Acid	7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65
This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

State Right-to-Know

Massachusetts Right-to-Know Act – Substance List	Hydrochloric Acid	7647-01-0
New Jersey Worker and Community Right-to-Know Act	Hydrochloric Acid	7647-01-0

	Pepsin A	9001-75-6
Pennsylvania Right-to-Know Act – Hazardous Substance	Hydrochloric Acid	7647-01-0
	Pepsin A	9001-75-6
Rhode Island Right-to-Know Act	Hydrochloric Acid	7647-01-0

U.S. EPA Label Information

No information available

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation / last revision: June 18, 2018

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistant, Bio-accumulable, Toxic
vPvB: very Persistent and very Bioaccumulative
OSHA: Occupational Safety & Health Administration
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3