SAFETY DATA SHEET

Revision date 16-Feb-2022



Revision Number 1

1. Identification Product identifier **Product Name** E-Pik 219-S Other means of identification EPI-0391CC Product Code(s) UN1805 **UN number or ID number** None Synonyms Details of the supplier of the safety data sheet Manufacturer Address Electrochemical Products Inc. West Lincoln Ave New Berlin, WI 53151 Phone: 262-786-9330 E-mail: us-sales@epi.com www.epi.com Fax: 262-786-9403 Emergency telephone number

Emergency Telephone

NCEC (#EPI-29003) +1 202 464 2554, +44 1865 407333

2. Hazard(s) identification

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Hazards not otherwise classified (HNOC)

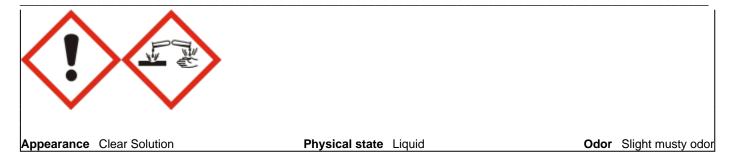
Not applicable

Label elements

Danger

Hazard statements

Harmful if inhaled Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Use only outdoors or in a well-ventilated area Do not breathe dusts or mists Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower Wash contaminated clothing before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing Immediately call a POISON CENTER or doctor IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Water	7732-18-5	75-85	*
Phosphoric acid	7664-38-2	4-6	*

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

4. First-aid measures

Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
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. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. 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	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.	
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.	
Most important symptoms and effec	ts, both acute and delayed	
Symptoms	Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.	
Indication of any immediate medical 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.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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.
Explosion data Sensitivity to mechanical impact None.	
Sensitivity to static discharge	None.
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

Personal precautions, protective equipment and emergency procedures

Personal precautions	Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.
Other information	Refer to protective measures listed in Sections 7 and 8.

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.

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. Avoid breathing vapors or mists.

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.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Phosphoric acid	STEL: 3 mg/m ³	TWA: 1 mg/m ³	IDLH: 1000 mg/m ³
7664-38-2	TWA: 1 mg/m ³	(vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³
		(vacated) STEL: 3 mg/m ³	STEL: 3 mg/m ³

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.		
Individual protection measures, su	Individual protection measures, such as personal protective equipment		
Eye/face protection	Tight sealing safety goggles. Face protection shield.		
Hand protection	Wear suitable gloves. Impervious gloves.		
Skin and body protection Respiratory protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. No protective equipment is needed under normal use conditions. If exposure limits are		
	exceeded or irritation is experienced, ventilation and evacuation may be required.		
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do		

not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear Solution
Color	Colorless to light yellow
Odor	Slight musty odor
	0

Property_	Values_	Remarks • Method
pH	< 1	None known
Melting point / freezing point	0 °C / 32 °F	None known
Boiling point / boiling range	100 °C / 212 °F	None known
Flash point	No data available	None known
Relative density	1.05 - 1.09	None known
Water solubility	Completely	None known
Other information VOC Content (%)	0	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	Acids. Bases. Oxidizing agent.
Hazardous decomposition products None known based on information supplied.	

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). 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. Harmful by inhalation.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.
Ingestion	Specific test data for the substance or mixture is not available. Causes burns. (based on

components). 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 related to the physical, chemical and toxicological characteristics

Symptoms

Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity No information available

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

ATEmix (oral)	11,933.50 mg/kg
ATEmix (dermal)	29,198.60 mg/kg
ATEmix (inhalation-dust/mist)	3.5700 mg/l

Unknown acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Phosphoric acid 7664-38-2	= 1530 mg/kg(Rat)	= 2740 mg/kg (Rabbit)	> 850 mg/m³ (Rat)1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Causes burns.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target organ effects	Respiratory system, Eyes, Skin.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

Ecotoxicity

Persistence and degradability	No information available.	
Bioaccumulation	There is no data for this product.	
Other adverse effects	No information available.	

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.	

14. Transport information

DOT

UN number or ID number Proper shipping name Transport hazard class(es) Packing group Special Provisions DOT Marine Pollutant Description Emergency Response Guide Number	UN1805 Phosphoric acid solution 8 III A7, IB3, N34, T4, TP1 NP UN1805, Phosphoric acid solution, 8, III 154
TDG UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Description	UN1805 Phosphoric acid, solution 8 III UN1805, Phosphoric acid, solution, 8, III
MEX UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Description Special Provisions	UN1805 Phosphoric acid, solution 8 III UN1805, Phosphoric acid, solution, 8, III 223
ICAO (air) UN number or ID number UN proper shipping name Transport hazard class(es) Packing group	UN1805 Phosphoric acid, solution 8 III

Description Special Provisions	UN1805, Phosphoric acid, solution, 8, III A3
IATA UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Description Special Provisions ERG Code	UN1805 Phosphoric acid, solution 8 III UN1805, Phosphoric acid, solution, 8, III A3, A803 8L
IMDG UN number or ID number UN proper shipping name Transport hazard class(es) Packing group EmS-No Special Provisions Marine pollutant Description	UN1805 Phosphoric acid solution 8 III F-A, S-B 223 NP UN1805, Phosphoric acid solution, 8, III
RID UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Classification code Description	UN1805 Phosphoric acid, solution 8 III C1 UN1805, Phosphoric acid, solution, 8, III
ADR UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Classification code Tunnel restriction code Description	UN1805 Phosphoric acid, solution 8 III C1 (E) UN1805, Phosphoric acid, solution, 8, III, (E)
ADN UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Classification code Description Equipment Requirements	UN1805 Phosphoric acid, solution 8 III C1 UN1805, Phosphoric acid, solution, 8, III PP, EP

15. Regulatory information

International Inventories

TSCA

Complies

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Water	7732-18-5	Present	Active
Trade secret	-	Present	Active
Phosphoric acid	7664-38-2	Present	Active
Trade secret	-	Present	Active

DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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).

<u>CERCLA</u>

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

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Phosphoric acid 7664-38-2	5000 lb	-	RQ 5000 lb final RQ 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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water	-	-	Х
7732-18-5			
Phosphoric acid	Х	-	Х
7664-38-2			
Trade secret	Х	-	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information					
NFPA HMIS	Health hazards 3 Health hazards 3	Flammability Flammability		Instability 0 Physical hazards 0	Special hazards - Personal protection X
Key or legend to abbreviations and acronyms used in the safety data sheet					
	xposure controls/persona				-
	A (time-weighted average)	5	STEL		m Exposure Limit)
Ceiling Ma	ximum limit value			Skin designation	1
Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Library of Medicine's Cooperation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization					
Revision date Revision Note <u>Disclaimer</u>	16-Feb-20 No informa	22 ation available.			

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet