SAFETY DATA SHEET



Revision date 28-Jun-2022

Revision Number 1

1. Identification

Product identifier

Product Name Insta Blak 333

Other means of identification

Product Code(s) EPI-0003

UN number or ID number UN3264

Synonyms None

Details of the supplier of the safety data sheet

Manufacturer Address

Electrochemical Products Inc. 17000 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

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Causes severe skin burns and eye damage

May cause cancer

May cause damage to organs through prolonged or repeated exposure



Appearance Light blue solution

Physical state Liquid

Odor Characteristic

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

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

Other information

May be harmful if swallowed. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No	Weight-%	Trade secret
Water	7732-18-5	85-95	*
Selenous acid	7783-00-8	1-4	*
Phosphoric acid	7664-38-2	1-3	*
Sulfuric acid, copper(2+) salt (1:1)	7758-98-7	1-4	*
Nitric acid	7697-37-2	0.1-1.5	*

^{*}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. 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 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 contactWash 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.

Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

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

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.

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.

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
Selenous acid	TWA: 0.2 mg/m ³ Se	TWA: 0.2 mg/m ³ Se	IDLH: 1 mg/m³ Se
7783-00-8	_	(vacated) TWA: 0.2 mg/m ³ Se	TWA: 0.2 mg/m ³ except
			Selenium hexafluoride Se
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
Sulfuric acid, copper(2+) salt	TWA: 1 mg/m ³ Cu dust and mist	-	IDLH: 100 mg/m ³ Cu dust and
(1:1)	-		mist
7758-98-7			TWA: 1 mg/m³ Cu dust and
			mist
Nitric acid	STEL: 4 ppm	TWA: 2 ppm	IDLH: 25 ppm
7697-37-2	TWA: 2 ppm	TWA: 5 mg/m ³	TWA: 2 ppm
		(vacated) TWA: 2 ppm	TWA: 5 mg/m ³
		(vacated) TWA: 5 mg/m ³	STEL: 4 ppm
		(vacated) STEL: 4 ppm	STEL: 10 mg/m ³
		(vacated) STEL: 10 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, 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 Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

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 Light blue solution

Color blue

Odor Characteristic

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

None known pН < 1 0 °C / 32 °F Melting point / freezing point None known 108.9 °C / 228 °F Boiling point / boiling range None known Flash point No data available None known Relative density 1.02 - 1.08 None known Water solubility Completely None known

Other information

VOC Content (%)

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.

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.

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) 3,168.90 mg/kg **ATEmix (dermal)** 96,467.50 mg/kg

ATEmix (inhalation-dust/mist) 7.98 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
7732-18-5			
Phosphoric acid	= 1530 mg/kg (Rat)	= 2740 mg/kg (Rabbit)	> 850 mg/m³ (Rat) 1 h
7664-38-2			
Sulfuric acid, copper(2+) salt	= 300 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
(1:1)			
7758-98-7			
Nitric acid	-	-	= 2500 ppm (Rat) 1 h
7697-37-2			

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

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

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Selenous acid	-	Group 3	-	-
7783-00-8		·		
Nitric acid	-	Group 2A	-	X
7697-37-2		Group 1		

Legend

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Skin.

Aspiration hazard

Other adverse effects

No information available.

Interactive effects

No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sulfuric acid, copper(2+)	-	LC50: =0.1mg/L (96h,	-	EC50: 0.0058 -
salt (1:1)		Oncorhynchus mykiss)		0.0073mg/L (48h,
7758-98-7				Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

	Component information			
Chemical name		Partition coefficient		
	Nitric acid	-2.3		
	7697-37-2			

Other adverse effects No information available.

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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.

US EPA Waste Number U204

14. Transport information

DOT

UN3264 **UN** number or ID number

Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Transport hazard class(es) Packing group П

Reportable Quantity (RQ) (Selenous acid: RQ (kg)= 4.54, Sulfuric acid, copper(2+) salt (1:1): RQ (kg)= 4.54)

Selenous acid: RQ (lb)= 10, Sulfuric acid, copper(2+) salt (1:1): RQ (lb)= 10

DOT reportable quantity kg

(calculated)

Selenous acid: RQ (kg)= 159.00, Sulfuric acid, copper(2+) salt (1:1): RQ (kg)= 448.00

DOT Reportable Quantity lbs.

(calculated)

Selenous acid: RQ (lb)= 350.00, Sulfuric acid, copper(2+) salt (1:1): RQ (lb)= 986.00

Special Provisions 386, B2, IB2, T11, TP2, TP27

DOT Marine Pollutant

Marine pollutant Selenous acid, Sulfuric acid, copper(2+) salt (1:1)

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid), 8, II, Description

Marine pollutant (Selenous acid, Sulfuric acid, copper(2+) salt (1:1))

Emergency Response Guide

Number

TDG

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

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Transport hazard class(es) Packing group Ш **Special Provisions** 16

Marine pollutant Selenous acid, Sulfuric acid, copper(2+) salt (1:1).

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid), 8, II Description

MEX

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Transport hazard class(es) Packing group

Technical Name Phosphoric acid, Nitric acid

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid), 8, II

Special Provisions 274

ICAO (air)

UN number or ID number UN3264

Corrosive liquid, acidic, inorganic, n.o.s. **UN proper shipping name**

Transport hazard class(es)

Packing group Ш

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid), 8, II

Special Provisions А3

IATA

UN number or ID number

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Transport hazard class(es)

Packing group

Technical Name Phosphoric acid, Nitric acid

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid), 8, II

Special Provisions A3, A803 ERG Code 8L

IMDG

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Transport hazard class(es) 8
Packing group II
EmS-No F-A, S-B
Special Provisions 274
Marine pollutant P

Marine Pollutant Selenous acid

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid, Selenous

acid), 8, II, Marine pollutant

RID

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Transport hazard class(es) 8
Packing group II
Classification code C1
Special Provisions 274

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid), 8, II,

Environmentally Hazardous

<u>ADR</u>

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Transport hazard class(es) 8
Packing group II
Classification code C1
Tunnel restriction code (E)
Special Provisions 274

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid), 8, II, (E),

Environmentally Hazardous

ADN

UN number or ID number UN3264

UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Transport hazard class(es) 8
Packing group II
Classification code C1
Special Provisions 274

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Nitric acid), 8, II,

Environmentally Hazardous

Equipment Requirements 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
Selenous acid	7783-00-8	Present	Active
Phosphoric acid	7664-38-2	Present	Active
Sulfuric acid, copper(2+) salt (1:1)	7758-98-7	Present	Active

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Trade secret	-	Present	Active
Nitric acid	7697-37-2	Present	Active
Trade secret	-	Present	Active

DSL/NDSL Complies

EINECS/ELINCS Does not comply

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).

CERCLA

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)
Selenous acid 7783-00-8	10 lb	10 lb	RQ 10 lb final RQ RQ 4.54 kg final RQ
Phosphoric acid 7664-38-2	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Sulfuric acid, copper(2+) salt (1:1) 7758-98-7	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
Nitric acid 7697-37-2	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 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 7732-18-5	-	-	Х
Selenous acid 7783-00-8	Х	-	X
Phosphoric acid 7664-38-2	Х	-	X
Sulfuric acid, copper(2+) salt (1:1) 7758-98-7	Х	-	X
Trade secret	Х	-	Х
Nitric acid 7697-37-2	Х	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA **Health hazards** 3 Flammability 0 Instability 0 Special hazards -**HMIS** Health hazards 3 * Flammability 0 Physical hazards 0 Personal protection X

Chronic Hazard Star Legend * = Chronic Health Hazard

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

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) **STEL** STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Skin designation

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 Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation 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 Screening Information Data Set

World Health Organization

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Revision Note No information available.

Disclaimer

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,

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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