SAFETY DATA SHEET



Revision date 15-Sep-2022

Revision Number 1

1. Identification

Product identifier

Product Name Ultra Blak 400L

Other means of identification

Product Code(s) EPI-0078C

UN number or ID number UN1824

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

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements Harmful if swallowed

Causes severe skin burns and eye damage



Appearance Clear viscous solution

Physical state Liquid

Odor None

Precautionary Statements - Response

Call a POISON CENTER or doctor/physician if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor

IF SWALLOWED:

Rinse mouth

Do NOT induce vomiting

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful in contact with skin. Very toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Water	7732-18-5	30-60	*
Sodium hydroxide	1310-73-2	15-40	*
Sodium nitrite	7632-00-0	1-5	*
Sodium nitrate	7631-99-4	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 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. If symptoms persist, call a

physician.

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 medical attention if irritation develops and persists.

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.

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

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.

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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. Keep out of the reach

of children. Protect from moisture. Store locked up. Store away from other materials.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2		-	Ceiling: 2 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 Clear viscous solution

Color colorless Odor None

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

рΗ $11 - 1\overline{3}$ None known 7.2 - 10 °C / 45 - 50 °F Melting point / freezing point None known Boiling point / boiling range 140.6 °C / 285.1 °F None known Flash point No data available None known Relative density 1.48 - 1.51 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.

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

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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. May be harmful in contact with skin.

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) 567.20 mg/kg
ATEmix (dermal) 3,317.00 mg/kg
ATEmix (inhalation-dust/mist) 25.20 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
7732-18-5			
Sodium hydroxide 1310-73-2	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Sodium nitrite 7632-00-0	= 85 mg/kg (Rat)	-	= 5.5 mg/L (Rat)4 h
Sodium nitrate 7631-99-4	= 1267 mg/kg (Rat)	-	-

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 toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposureNo 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 Very toxic to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium hydroxide	-	LC50: =45.4mg/L (96h,	-	-
1310-73-2		Oncorhynchus mykiss)		
Sodium nitrite	-	LC50: 0.092 - 0.13mg/L	-	-
7632-00-0		(96h, Oncorhynchus		
		mykiss)		
		LC50: 0.4 - 0.6mg/L (96h,		
		Oncorhynchus mykiss)		
		LC50: 0.65 - 1mg/L (96h,		
		Oncorhynchus mykiss)		
		LC50: =0.19mg/L (96h,		
		Oncorhynchus mykiss)		
		LC50: =2.3mg/L (96h,		
		Pimephales promelas)		
		LC50: =20mg/L (96h,		
		Pimephales promelas)		
Sodium nitrate	-	LC50: 994.4 - 1107mg/L	-	-
7631-99-4		(96h, Oncorhynchus		
		mykiss)		
		LC50: =2000mg/L (96h,		
		Lepomis macrochirus)		

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Component information		
Chemical name	Partition coefficient	
Sodium nitrite 7632-00-0	-3.7	
Sodium nitrate 7631-99-4	-3.8	

Other adverse effects No information available.

13. Disposal considerations

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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 UN1824

Proper shipping name Sodium hydroxide solution

Transport hazard class(es) **Packing group**

Reportable Quantity (RQ) (Sodium nitrite: RQ (kg)= 45.40, Sodium hydroxide: RQ (kg)= 454.00) Sodium nitrite: RQ

(lb)= 100.00, Sodium hydroxide: RQ (lb)= 1000.00

DOT reportable quantity kg

(calculated)

DOT Reportable Quantity lbs.

Sodium nitrite: RQ (lb)= 2222.00, Sodium hydroxide: RQ (lb)= 2632.00

Sodium nitrite: RQ (kg)= 1009.00, Sodium hydroxide: RQ (kg)= 1195.00

(calculated)

Special Provisions B2, IB2, N34, T7, TP2

DOT Marine Pollutant

Marine pollutant Sodium nitrite

Description UN1824, Sodium hydroxide solution, 8, II, Marine pollutant (Sodium nitrite)

Emergency Response Guide

Number

TDG

UN number or ID number UN1824

UN proper shipping name Sodium hydroxide solution

Transport hazard class(es) Packing group Ш

Description UN1824, Sodium hydroxide solution, 8, II

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MEX

UN number or ID number UN1824

UN proper shipping name Sodium hydroxide solution

Transport hazard class(es) Packing group

Description UN1824, Sodium hydroxide solution, 8, II

ICAO (air)

UN number or ID number UN1824

UN proper shipping name Sodium hydroxide solution

Transport hazard class(es) 8 Packing group

Description UN1824, Sodium hydroxide solution, 8, II

Special Provisions А3

IATA

UN number or ID number UN1824

UN proper shipping name Sodium hydroxide solution

Transport hazard class(es) Packing group Ш

Description UN1824, Sodium hydroxide solution, 8, II

Special Provisions A3. A803 **ERG Code** 8L

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IMDG

UN number or ID number UN1824

UN proper shipping name Sodium hydroxide solution

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

Description UN1824, Sodium hydroxide solution, 8, II, Marine pollutant

RID

UN number or ID number UN1824

UN proper shipping name Sodium hydroxide solution

Transport hazard class(es) 8
Packing group || Classification code C5

Description UN1824, Sodium hydroxide solution, 8, II, Environmentally Hazardous

ADR

UN number or ID number UN1824

UN proper shipping name Sodium hydroxide solution

Transport hazard class(es) 8
Packing group II
Classification code C5
Tunnel restriction code (E)

Description UN1824, Sodium hydroxide solution, 8, II, (E), Environmentally Hazardous

ADN

UN number or ID number UN1824

UN proper shipping name Sodium hydroxide solution

Transport hazard class(es) 8
Packing group II
Classification code C5

Description UN1824, Sodium hydroxide solution, 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
Sodium hydroxide	1310-73-2	Present	Active
Sodium nitrate	7631-99-4	Present	Active
Sodium nitrite	7632-00-0	Present	Active
Trade secret	-	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).

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)
Sodium hydroxide	1000 lb	-	RQ 1000 lb final RQ
1310-73-2			RQ 454 kg final RQ
Sodium nitrite	100 lb	-	RQ 100 lb final RQ
7632-00-0			RQ 45.4 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	-	-	X
7732-18-5			
Sodium hydroxide	X	-	X
1310-73-2			
Sodium nitrate	X	-	X
7631-99-4			
Sodium nitrite	X	-	X
7632-00-0			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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16. Other information

NFPAHealth hazards3Flammability0Instability0Special hazards-HMISHealth hazards3 *Flammability0Physical hazards0Personal protectionX

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 NoteNo 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, 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