SAFETY DATA SHEET

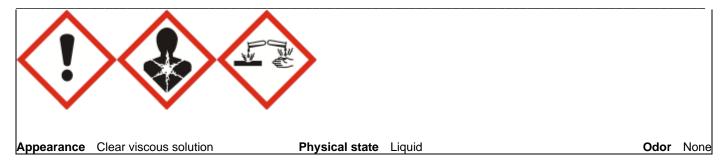
Revision date 16-Sep-2022



Revision Number 1

1. Identification			
Product identifier			
Product Name	Ultra Blak 404L		
Other means of identification			
Product Code(s)	EPI-0598C		
UN number or ID number	UN1824		
Synonyms	None		
Details of the supplier of the safety	y 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 4073	333	
2. Hazard(s) identification			
Classification_			
Acute toxicity - Oral	lc	Category 4	
Skin corrosion/irritation	C	Category 1	Sub-category A
Serious eye damage/eye irritation	C	Category 1	
Hazards not otherwise classified (I Not applicable	HNOC)		
Label elements_			
Danger			

<u>Hazard statements</u> Harmful if swallowed Causes severe skin burns and eye damage



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 eat, drink or smoke when using this product Do not breathe dusts or mists

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 If skin irritation occurs: Get medical advice/attention 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 experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician 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

Unknown acute toxicity

Other information

May be harmful in contact with skin. Harmful to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Sodium hydroxide	1310-73-2	45-55	*
Water	7732-18-5	45-55	*
Sodium nitrate	7631-99-4	5-8	*

*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. Immediate medical attention is required. 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. If eye irritation persists: Get medical advice/attention.	
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.	
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 effe	cts, both acute and delayed	
Symptoms	Burning sensation.	
Indication of any immediate medica	al 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 Large Fire	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. 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 impac	et 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 containm	ent 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 ConditionsKeep 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.
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.
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 Physical state Appearance Color Odor	<u>chemical properties</u> Liquid Clear viscous solution amber None	
<u>Property</u> pH Melting point / freezing point Boiling point / boiling range Flash point Relative density Water solubility	<u>Values</u> 11.5 - 13 7.2 - 10 °C / 45 - 50 °F 123.9 °C / 255 °F No data available 1.4 - 1.5 Completely	Remarks • Method None known None known None known None known None known 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 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 calculate ATEmix (oral) ATEmix (dermal)	ed based on chapter 3.1 of the GHS document 624.40 mg/kg 2,398.80 mg/kg

Unknown acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hydroxide 1310-73-2	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
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 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

Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium hydroxide 1310-73-2	-	LC50: =45.4mg/L (96h, Oncorhynchus mykiss)	-	-
Sodium nitrate 7631-99-4	-	LC50: 994.4 - 1107mg/L (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

Chemical name	Partition coefficient	
Sodium nitrate	-3.8	
7631-99-4		

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.

|--|

DOT_UN number or ID numberProper shipping nameTransport hazard class(es)Packing groupReportable Quantity (RQ)DOT reportable quantity kg(calculated)DOT Reportable Quantity Ibs.(calculated)Special ProvisionsDOT Marine PollutantDescriptionEmergency Response GuideNumber	UN1824 Sodium hydroxide solution 8 II (Sodium hydroxide: RQ (kg)= 454.00) Sodium hydroxide: RQ (lb)= 1000.00 Sodium hydroxide: RQ (kg)= 904.00 Sodium hydroxide: RQ (lb)= 1992.00 B2, IB2, N34, T7, TP2 NP UN1824, Sodium hydroxide solution, 8, II 154
<u>TDG</u> UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Description	UN1824 Sodium hydroxide solution 8 II UN1824, Sodium hydroxide solution, 8, II
<u>MEX</u> UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Description	UN1824 Sodium hydroxide solution 8 II UN1824, Sodium hydroxide solution, 8, II
ICAO (air) UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Description Special Provisions	UN1824 Sodium hydroxide solution 8 II UN1824, Sodium hydroxide solution, 8, II A3
IATA UN number or ID number UN proper shipping name Transport hazard class(es) Packing group Description Special Provisions ERG Code	UN1824 Sodium hydroxide solution 8 II UN1824, Sodium hydroxide solution, 8, II A3, A803 8L
IMDG UN number or ID number UN proper shipping name Transport hazard class(es) Packing group EmS-No Marine pollutant Description	UN1824 Sodium hydroxide solution 8 II F-A, S-B NP UN1824, Sodium hydroxide solution, 8, II
<u>RID</u> UN number or ID number	UN1824

UN proper shipping name Transport hazard class(es)	Sodium hydroxide solution 8 II
Packing group	
Classification code	C5
Description	UN1824, Sodium hydroxide solution, 8, II
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)
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
Equipment Requirements	PP, EP
1. h	,

15. Regulatory information

International Inventories

TSCA

Complies

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Sodium hydroxide	1310-73-2	Present	Active
Water	7732-18-5	Present	Active
Sodium nitrate	7631-99-4	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

<u>SARA 313</u>

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 1310-73-2	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
Sodium hydroxide	Х	-	Х
1310-73-2			
Water	-	-	Х
7732-18-5			
Sodium nitrate 7631-99-4	Х	-	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Health hazards 3* *= Chronic H	Flammability lealth Hazard	0	Physical haza	rds 0	Personal protection
* = Chronic F	lealth Hazard				
<u>riations and acronyms u</u>	sed in the safe	ty data	sheet		
osure controls/persona	I protection				
(time-weighted average)	S	STEL	STEL (Short Term Exposure Limit)		
num limit value	*		Skin des	ignation	· · · · ·
				5	
	oosure controls/persona (time-weighted average) num limit value	oosure controls/personal protection (time-weighted average) S num limit value *	oosure controls/personal protection (time-weighted average) STEL num limit value *	(time-weighted average) STEL STEL (S	oosure controls/personal protection (time-weighted average) STEL num limit value * Skin designation

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 **Revision date** 16-Sep-2022 **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, 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