

SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MINLOX

PRODUCT NAME: MINLOX

SYNONYMS: Mineral Oxychloride, Liquid Ozone.

DATE: January 1, 2021

SUPERSEDES DATE: June 17, 2015

COMPANY INFORMATION:

MINLOX, LLC
120 Newport Center Dr.
Newport Beach, CA 92660
(949) 718-4426

Intended use of the chemical(s): For industrial use only, refer to label and technical data sheet or call number below

Standard industrial classification (SIC): 2835

The public cannot use the chemical; trained professionals use the chemical only.

24-HOUR EMERGENCY PHONE: (714) 497-7960

24/7 HEALTH EMERGENCIES: (800) 222-1222 National Poison Control Center

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

PHYSICAL APPEARANCE: Deep yellowish colored liquid

IMMEDIATE CONCERNS: No applicable data available

POTENTIAL HEALTH EFFECTS

EYES: Causes severe irritation (tears, blurred vision and redness) May result in permanent eye damage.

SKIN: Causes severe skin irritation and tissue damage.

INGESTION: May cause nausea and vomiting. May cause irritation to the mouth, throat and stomach.

INHALATION: May cause physical discomfort to the respiratory tract.

UNCLASSIFIED HAZARDS: WARNING!! DO NOT MIX THIS PRODUCT WITH ACIDS

SIGNAL WORD: **Danger**

Potential Carcinogens as listed by OSHA, IARC, or NTP: NONE

OSHA HCS Status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

GHS Pictogram(s):



HAZARD STATEMENTS

CODE	STATEMENT	GHS CHAPTER	CATEGORY
H302	Harmful if swallowed.	Acute toxicity, oral (chapter 3.1)	4
H312	Harmful if in contact with skin.	Acute toxicity, dermal (chapter 3.1)	4
H314	Causes severe skin burns and eye damage.	Skin corrosion/irritation (chapter 3.2)	1A, 1B, 1C
H318	Causes serious eye damage.	Serious eye damage/eye irritation (chapter 3.3)	1
H332	Harmful if inhaled.	Acute toxicity, inhalation (chapter 3.1)	4

PRECAUTIONARY STATEMENTS

P202	Do not handle until all safety precautions have been read and understood.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P501	Dispose of contents/container in accordance with local/state/national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME: Sodium oxychlorides

C.A.S: 7681-52-9

%: 11.5 -13.5

TRADE NAME: MINLOX

EINECS #: 231-908-7

REACH REG. #: Yes

SECTION 4: FIRST AID MEASURES

IF INHALED

Move to fresh air free from risk of further exposure. If person not breathing call 9-1-1, then apply rescue breathing. Seek medical attention as soon as possible.

IN CASE OF EYE CONTACT

Flush with clean, lukewarm water raising upper and lower eyelids at low pressure for 20 minutes. Remove contact lenses, if present, after the first five minutes and continue to rinse the eyes. Seek medical attention immediately.

IN CASE OF SKIN CONTACT

Rinse area with clean water for 20 minutes. Call poison control center or doctor for treatment advice.

IF INGESTED

Call a poison control center or doctor immediately for treatment advice. DO NOT INDUCE VOMITING. Dilute with ½ to 1 glass of water to dilute product. Lower the head when person is vomiting to minimize entry into throat and lungs.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point & Method:

Not flammable.

Flammable Limits:

LEL = NE% UEL = NE%

Extinguishing Method:

Carbon dioxide, dry chemical, foam or water spray.

FIRE OR EXPLOSION HAZARDS:

This material under complete combustion will form carbon oxides, halogenated compounds, mineral oxide.

SPECIAL FIREFIGHTING PROCEDURES:

This product is a strong oxidizer which intensifies fire. Keep upwind of fire. Full emergency equipment with self-contained breathing apparatus and full protective clothing to be worn by firefighters.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES:

Wear PPE; product is basic and a strong oxidizer. Do not mix with other chemicals. Absorb spilled liquid in a suitable material. Sweep or vacuum material into disposal containers. Provide adequate ventilation. Prevent from entering into soil, ditches, sewers, waterways and/or ground water. See section 12 Ecological information.

SECTION 7: HANDLING AND STORAGE

STORAGE TEMPERATURE:

Keep containers tightly closed and keep in cool dry area. Keep out of direct sunlight. Temperature needs to stay 80°F (26.7°C) to avoid decomposition.

SPECIAL SENSITIVITY:

Avoid contact with skin and eyes, wear PPE in (section 8). Keep away from heat. Do not mix with other chemicals.

HANDLING AND STORAGE PRECAUTIONS:

Avoid breathing the vapor or mist. Use section 8 safety procedures and good personal hygiene. Wash thoroughly after use and before eating, drinking, chewing gum or using tobacco.

SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION

CHEMICAL NAME	OSHA PEL	OSHA STEL	ACGIH TWA	ACGIH STEL
Mineral Oxychlorides	NE	NE	NE	NE

ENGINEERING CONTROLS:

Work in well ventilated areas. Do not breathe vapors or mist. Ensure that existing ventilation is sufficient to prevent the circulation and/or accumulation of vapors in the air.

PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE: Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor.

SKIN: Neoprene rubber gloves and suit should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.

RESPIRATORY: In case of insufficient ventilation, wear suitable respiratory equipment.

MSHA/NIOSH (approved or equivalent) available in case of spillage or equipment failure.

WORK HYGIENIC PRACTICES: Discard contaminated gloves after use. Have eye-wash facilities in the immediate vicinity. Work in adequately ventilated area. Do not breathe vapors or mist. Minimize any contact with any chemical.

COMMENTS: Eye wash station and safety shower should be available in immediate work area. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment, in accordance with the OSHA PPE Standard (29 CFR 1910.132), be conducted before using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Musty Yellowish Liquid
Odor	Slight Chlorine
Decomposition Temp:	Above 26.7 °C
pH-value @ 68 °F:	11.0 – 12.5, Typical
Specific Gravity:	1.14-1.22

Boiling Point:	110°C
Flash Point:	Not Applicable
Flammability:	None
Ignition temperature:	None
Support Combustion:	No
Auto Igniting:	None
Danger of explosion:	None
Explosion Lower Limit:	None
Explosion Upper Limit:	None
Vapor pressure @ 68 °F:	12.1 mm Hg
Relative Density:	1.14-1.22
Vapor Density:	2.61 (air= 1)
Evaporation Rate:	Not Determined
Solubility in Water:	Complete
Partition coefficient:	No data available
Dynamic viscosity:	2.95 cSt @ 20°C, 2.5 cSt @ 30°C.
Kinematic viscosity:	No data available
Organic Content %age:	No data available
Molecular Weight:	75.4 g/mole
Solids Content %age:	No data available
Other Information:	No data available

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Stable under recommended storage and handling conditions. Product begins to decompose at approximately 26.7°C releasing monoxide gas
REACTIVITY:	See sub-sections below.
POLYMERIZATION:	Hazardous polymerization is not expected to occur under normal temperatures and pressures.
CONDITIONS TO AVOID:	Heating will cause decomposition resulting in the release of monoxide gases
POSSIBILITY OF HAZARDOUS REACTIONS:	Interaction with strong oxidizers, acids or acidic materials.
INCOMPATIBLE MATERIALS:	Highly reactive or incompatible with the following materials: organic materials, metals, acids, alkalis, oxidizing materials, reducing materials, ammonia, finished petroleum products, paint products. Acid or ammonia contamination will release hazardous gases.
HAZARDOUS DECOMPOSITION MATERIALS:	Under normal conditions of storage and uses, hazardous polymerization will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

SKIN: Skin Corrosion/Irritation: Mildly irritating., Skin Acute Toxicity: Not Determined

EYES: Severely irritating.

INHALATION: INH-Rat LC50: 3.6 mg/L (4 hr. exposure).

INGESTION: Oral Rat LD50: 820 mg/kg CARCINOGENICITY

IARC: None of the components of this product are listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

NTP: None of the components of this product are listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

OSHA: None of the components of this product are listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

DERMAL TOXICITY: Dermal Rabbit LD₅₀: > 2,000 mg/kg

MUTAGENICITY: Not Determined

SENSITIZATION: Not a sensitizer

TERATOGENICITY: Not Determined

REPRODUCTIVE EFFECTS: Not Determined

TARGET ORGAN EFFECTS: Not Determined

ADDITIONAL INFORMATION: No additional information.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT	TEST	DURATION	ORGANISM TYPE	TEST RESULTS
Same as SDS Name	LC50	4.4 mg/L	Green Algae	–
Same as SDS Name	LC50	2.1 mg/L	Water Flea	–
Same as SDS Name	LC50	0.9 mg/L	Bluegill	–
Same as SDS Name	LC50	0.22 mg/L	Fathead	–
Same as SDS Name	LC ₅₀	8.8mg/L	Rainbow Trout	–

ECOTOXICITY: No applicable data available

BIOACCUMULATION: Not determined

PERSISTENCE DEGRADABILITY: Degradation is expected under aerobic and anaerobic conditions.

MOBILITY: Not determined

ENVIRONMENTAL DATA: In fresh water, reactive oxygen species (ROS) breaks down rapidly into non-toxic compounds when exposed to sunlight. In seawater, ROS declines rapidly.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: This product is a liquid, wear PPE as outlined in Section VIII. The product is basic. Wear proper PPE. Dispose according to the regulations of local, state and Federal regulatory agencies.

SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME: Hypochlorite solution

US DOT (GROUND) SHIPPING DESCRIPTION: UN1791, Hypochlorite solution, 8, III

IATA (AIR) SHIPPING DESCRIPTION: CARGO AIRCRAFT ONLY UN1791, Hypochlorite solution, 8, III

Use packing instruction 821. Shipping container limited to 60 L (15.85 gal)

IMO (WATER) SHIPPING DESCRIPTION: Marine Pollutant: Yes (Refer to Refer to 171.4 and 172.322 for further guidance)

UN1791, Hypochlorite solution, 8, III

Use packing instructions P001 and LP01

NOTE: If shipping container is greater than 780 gal add RQ to proper shipping descriptions.

SECTION 15: REGULATORY INFORMATION

OSHA STATUS: Oxidizer

TSCA STATUS: Not listed or exempt

CERCLA REPORTABLE QUANTITY: None.

CALIFORNIA PROPOSITION 65: None.

RCRA STATUS: None.

SARA 311/312 HAZARD NOTIFICATION/REPORTING

IMMEDIATE Y FIRE N SUDDEN RELEASE OF PRESSURE N
 DELAYED Y REACTIVE Y

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS: NO

SECTION 313 TOXIC CHEMICALS: .

RIGHT TO KNOW: All listed ingredients are found in MA, NJ, and PA.

EUROPEAN COMMUNITY:



WHMIS: , OXIDIZING MATERIAL

SECTION 16: OTHER INFORMATION, APPROVALS

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
 HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)**

NFPA		HMIS	
	0 Least		
1 Health	1 Slight	2	Health
0 Flammability	2 Moderate	0	Flammability
2 Instability	3 High	2	Reactivity
	4 Severe H	PPE	

REASON FOR ISSUE: This is a new SDS meets the GHS regulations (Section 2 pictograms) and REACH compliance (Section 3).

APPROVAL DATE: February 9, 2018

PREPARED BY: Wes Glenn
 wes@minlox.us

REVIEWED BY: Wes Glenn

ABBREVIATIONS:

CAS #	Chemical Abstract Service Number	EINECS	European Inventory of existing Commercial Chemical Sales
°C	Celsius temperature scale	°F	Fahrenheit temperature scale
Prop.	Proprietary	PE	Personal Protective Equipment
TLV	Threshold Limit Value	TWA	Time Weighted Average
STEL	Short-term Exposure Limit	PEL	Permissible Exposure Limit
OSHA	Occupational Safety & Health	NIOSH	National Institute of Safety & Health

NFPA	National Fire Protection Agency	WHMIS	Workplace Hazardous Materials Information System
NTP	National Toxicology Program	IARC	Int. Agency for Research on Cancer
RCRA	Resource Conservation Recovery ACT	TSCA	Toxic Substance Control Act
EC50	Effective Dose	LC50	Lethal Inhalation Concentration
LD50	Lethal Dose	CAS	Chemical Abstract Service Number
LEL	Lower explosive limit	UEL	Upper explosive limit
NDA	No Data Available	ND	Not determined
NE	None established	NA	Not Applicable
<	Less Than or Equal To	>	Greater Than or Equal To
CNS	Central Nervous System	CI	China
DSL	Canada	ECL	Korean Existing Chemicals List
EEC	European Economic Commission	ENCS	Japanese Existing and New Chemical List
EU	European Union	MAC	Netherlands
MAK	Germany	MITI	Japan
PICCS	Philippines	SWISS	Giffliste 1
UK	United Kingdom	USA	United States
VOC	Volatile organic content		
ACGIH	American Conference of Government Industrial Hygienists		
SARA	Superfund Amendments and Reauthorization Act		
AICS	Australian Inventory of Chemical Substances		
IARC	International Agency for Research on Cancer		

Taiwan List of Toxic Chemical Substances regulated under Taiwan Toxic Chemical Substances Control Act of 1086

This information is drawn from recognized sources believed to be reliable. MINLOX, LLC makes no guarantees or assumes any liability in connection with this information. The data and information on the Safety Data Sheet relates only to the specific material designated herein. Company assumes no legal responsibility for use or reliance upon the data. The user should be aware of changing technology, research, regulations, and analytical procedures that may require changes herein. The above data is supplied upon the condition that persons will evaluate this information and then determine its suitability for their use. Only U.S.A. regulations apply to the above.