



Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Chlorine Standard, 1000 ppm as Cl
NCL Catalog Number C-9B
Product Description Laboratory chemical
Supplier
NCL of Wisconsin, Inc. **Telephone:** 1-800-648-7836 **Fax:** 715-449-2454
P.O. Box 8 **Emergency Contact:** 1-800-424-9300 (Chemtrec)
Biramwood, WI 54414 **Email:** nclabs@nclabs.com

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification Not classified
Signal Word Not applicable
Pictograms None
Hazard Statements Not applicable
Precautionary Statements Not applicable
Other Hazards Not Contributing to the Classification None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity Not applicable
Common Name Not applicable

Mixture

Name	CAS #	Approximate %
Water	7732-18-5	>99.9
Potassium Permanganate	7722-64-7	<0.1

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
If Inhaled Remove person to fresh air and keep comfortable for breathing. Allow victim to rest.
In Case of Skin Contact Remove all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention.
In Case of Eye Contact Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: get medical advice/attention.
If Swallowed Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most Important Symptoms/Effects Acute and Delayed

Not expected to present a significant hazard under normal use.

Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical attention if exposed.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Foam. Dry powder. Sand. Carbon dioxide. Water spray.

Unsuitable Extinguishing Media Do not use high pressure water stream.

Special Hazards Arising from the Chemical

Thermal decomposition generates corrosive vapors. Reacts with some metals to release highly flammable gases/vapors.

Special Protective Actions for Fire-Fighters

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources. Ventilate area.

Environmental Precautions Prevent entry to surface and ground waters.

Methods and Materials for Containment and Cleaning Up Clean up spill with inert absorbent material. Collect spillage. Store away from other materials. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Conditions for Safe Storage Including any Incompatibilities Keep in a tightly closed container, stored in a cool, dry, ventilated area when not in use. Store away from sunlight, which can contribute to instability. Store away from organic, combustible, and strong reducing materials.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Potassium Permanganate (7722-64-7)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m ³
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	5 mg/m ³ as Mn

Appropriate Engineering Controls Material should be handled or transferred in a fume hood or with equivalent ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures Avoid all unnecessary exposure.

Eye/Face Protection Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material.

Skin Protection Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection Wear appropriate mask.

Other Information Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid
Color Dark purple
Odor Odorless
Odor Threshold Not determined
pH Not determined
Melting Point/Freezing Point Not determined
Initial Boiling Point and Boiling Range Not determined
Flash Point Not determined
Evaporation Rate Not determined

Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	Not determined
Solubility	Soluble in water
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Not available
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	Not available
Conditions to Avoid	Extremely high or low temperatures. Heat and sunlight can contribute to instability.
Incompatible Materials	Powdered metals, alcohol, arsenites, bromides, iodides, phosphorus, sulfuric acid, organic compounds, sulfur, activated carbon, hydrides, strong hydrogen peroxide, ferrous or mercurous salts, hypophosphites, hyposulfites, sulfites, peroxides, and oxalates
Hazardous Decomposition Products	When heated to decomposition, can emit toxic gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Not classified
Potassium Permanganate (7722-64-7)	
LD50 oral rat	1090 mg/kg
Water (7732-18-5)	
LD50 oral rat	≥90000 mg/kg
Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	No data available
Chronic Symptoms	Not available
Likely Routes of Exposure	Skin and eye contact
Other Information	Not available

SECTION 12: ECOLOGICAL INFORMATION

Ecology – Water Toxicity

Not classified.

Potassium Permanganate (7722-64-7)	
LC50 fishes 1	0.261 mg/l (96 h; Ictalurus punctatus)
EC50 Daphnia 1	0.235 mg/l (24 h; Daphnia magna)
LC50 fish 2	1.22 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	0.5 mg/l (96 h; Crustacea)
TLM fish 1	5.4 ppm (48 h; Lepomis macrochirus)
Threshold limit other aquatic organisms 1	> 0.64 mg/l (Plankton)
Threshold limit algae 1	10 mg/l (4 h; Chlorella sp.)
Persistence and Degradability	Not established
Bioaccumulative Potential	Not established
Log Pow	-1.73 (Estimated value)
Mobility in Soil	Not established
Other Adverse Effects	No additional information.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations	Dispose of contents/containers in accordance with local, state and federal regulations.
Other Information	Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number	Not applicable
UN Shipping Name	Not applicable
Transport Hazard Class(es)	Not applicable
Packing Group	Not applicable
Environmental Hazards	Not applicable
Transport in Bulk	Not applicable
Other Precautions	Not applicable

SECTION 15: REGULATORY INFORMATION

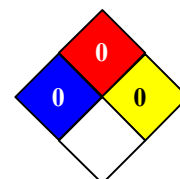
Potassium Permanganate (7722-64-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemicals listings)	
Reportable Quantity	100 lb
SARA Section 311/312 Hazard Classes	Reactive hazard
Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

SECTION 16: OTHER INFORMATION

Revision Date: 04/03/2015

NFPA Hazards

Health Hazard	0: Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
Fire Hazard	0: Materials that will not burn.
Instability/Reactivity	0: Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health 0: No significant risk to health.
Flammability 0: Materials that will not burn.
Physical Hazard 0: Materials that are normally stable.
Personal Protection B

C-9B	
Health	0
Flammability	0
Physical Hazard	0
Personal Protection	B

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END OF SAFETY DATA SHEET