



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

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Brom cresol Green-Methyl Red Indicator Solution		
NCL Catalog Number	B-15		
Product Description	Laboratory chemical		
Supplier	NCL of Wisconsin, Inc.	PO Box 8, Birnamwood, WI 54414	
	Telephone: 1-800-648-7836	Fax: 715-449-2454	
	Email: nclabs@nclabs.com	Emergency Contact: 1-800-424-9300 (Chemtrec)	

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification

Flammable Liquids	Category 2
Eye Irritation	Category 2A
Specific Target Organ Toxicity	Single Exposure Category 3



Signal Word

Danger

Hazard Statements

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary Statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing mist/vapors/spray.
P264	Wash exposed skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use dry sand, dry chemical, alcohol-resistant foam, or carbon dioxide to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification

Repeated exposure may cause skin dryness or cracking.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity Not applicable
Common Name Not applicable

Substances

Name	CAS #	Approximate %
Water	7732-18-5	49.85
Isopropanol	67-63-0	49.85
Bromcresol Green, Sodium Salt	62625-32-5	0.2
Methyl Red	493-52-7	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. Call a POISON CENTER or doctor/physician if you feel unwell.

In Case of Skin Contact Remove all contaminated clothing. Rinse skin with water/shower. Call a POISON CENTER or doctor/physician if you feel unwell.

In Case of Eye Contact Rinse carefully with water for several minutes. Do not apply neutralizing agents. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.

If Swallowed Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Give activated charcoal. Call a POISON CENTER or doctor/physician if you feel unwell. Ingestion of large quantities: immediately taken to hospital. Doctor: gastric lavage.

Most Important Symptoms/Effects Acute and Delayed

After Inhalation Exposure to high concentrations: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.

After Skin Contact Dry skin.

After Eye Contact Irritation of the eye tissue.

After Ingestion Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. Body temperature fall. Slowing respiration.

Chronic Symptoms On continuous or repeated exposure/contact: Redness of skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical attention if exposed.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Water spray. Polyvalent foam. Alcohol-resistant foam. BC powder. Carbon dioxide.

Unsuitable Extinguishing Media Do not use a heavy water stream.

Special Hazards Arising from the Chemical

Highly flammable. Gas/vapor flammable with air within explosion limits. May be ignited by sparks. Gas/vapor spreads at floor level. Violent to explosive reaction with many compounds. On exposure to light, can release harmful gases/vapors. Violent explosive reaction with strong oxidizers. Prolonged storage in large quantities may form peroxides.

Special Protective Actions for Fire-Fighter

Wear self-contained breathing apparatus and protective clothing.

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. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental Precautions	Prevent entry to sewers and public waters.
Methods and Materials for Containment and Cleaning Up	Collect spillage with inert absorbent material. Store away from other materials. Wash clothing/equipment after handling. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

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, low ventilated area. Store away from sunlight, which can contribute to instability. Store away from oxidizing agents, direct sunlight, heat sources, and sources of ignition.
Storage Area	Ventilate at floor level. Fireproof storage room and provide an automatic sprinkler system. Provide tub for collecting spills. Provide tank with inert absorbent material. Comply with legal requirements.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Isopropyl Alcohol (2-Propanol) (67-63-0)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	400 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm

Appropriate Engineering Controls	Material should be handled or transferred in a fume hood or with equivalent ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Individual Protection Measures	Avoid all unnecessary exposure.
Skin Protection	Protective gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.
Eye 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. Maintain eye-wash fountain and quick-drench facilities in work area.
Respiratory Protection	Wear appropriate mask.
Other Information	Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Dark red/orange liquid
Odor	Mild alcohol odor
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	Not determined
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	CO and CO ₂ are formed. Violent and explosive reaction with strong oxidizers. Prolonged storage in large quantities may form peroxides.
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	No additional information available.
Conditions to Avoid	Extremely high or low temperatures. Heat and sunlight can contribute to instability. Keep away from open flames and sparks.
Incompatible Materials	May react violently with alkalis and strong oxidizers.
Hazardous Decomposition Products	When heated to decomposition, can emit toxic gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Not classified
Isopropyl Alcohol (2-Propanol) (67-63-0)	
LD50 oral rat	5045 mg/kg
LD50 dermal rabbit	12800 mg/kg
LC50 inhalation rat (mg/l)	73 mg/l/4h

Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Causes serious eye irritation.
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	May cause drowsiness or dizziness.
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	No data available
Symptoms/Injuries After Inhalation	Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.
Symptoms/Injuries After Skin Contact	Dry skin.
Symptoms/Injuries After Eye Contact	Irritation of the eye tissue.
Symptoms/Injuries After Ingestion	Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. Lower body temperature. Slowing of respiration.
Chronic Symptoms	Redness of skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

SECTION 12: ECOLOGICAL INFORMATION

Ecology – Water Toxicity Ground water pollutant. Not harmful to fish. Not harmful to invertebrates. Not harmful to algae. Inhibition of activated sludge.

Isopropanol, 50% v/v (67-63-0)	
LC50 fish 1	4200 mg/l (96h; Rasbora heteromorpha)
EC50 Daphnia 1	>10000 mg/l (48h; Daphnia magna)
LC50 fish 2	9640 mg/l (96h; Pimephales promelas)
EC50 Daphnia 2	13299 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	>1000 mg/l (72h; Scenedesmus subspicatus)
Threshold limit algae 2	1800 mg/l (72h; Algae)

Persistence and Degradability Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No data on mobility of the substance available.

Biochemical Oxygen Demand (BOD)	1.19 g O ₂ /g Substance
Chemical Oxygen Demand (COD)	2.23 g O ₂ /g Substance
ThOD	2.4 g O ₂ /g Substance
BOD (% of ThOD)	0.49 % ThOD

Bioaccumulative Potential Log Pow: 0.05, Low potential for bioaccumulation (Log Pow <4)

Mobility in Soil Surface Tension: 0.0237 N/m

Other Adverse Effects Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations Dispose of contents/containers in accordance with local, state and federal regulations. Hazardous waste shall not be mixed together with other waste. Recycle by distillation. Do not discharge into surface water.

Ecology-Waste Materials Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number 1219

UN Shipping Name Isopropanol

Transport Hazard Class(es) 3 – Flammable and combustible liquid.

Packing Group II

Environmental Hazards Not applicable

Transport in Bulk 242

Special Precautions Not applicable

SECTION 15: REGULATORY INFORMATION

Isopropyl Alcohol (2-Propanol) (67-63-0)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Listed on SARA Section 313 (Specific Toxic Chemical Listings)
Bromcresol Green, Sodium Salt (62625-32-5)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory
Methyl Red (493-52-7)
Listed on the United States TSCA (Toxic Substances Control Act) Inventory

SECTION 16: OTHER INFORMATION

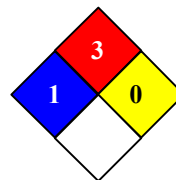
Revision Date: 04/03/2015

NFPA Hazards

Health Hazard 1: Exposure would cause irritation with only minor residual injury.

Fire Hazard 3: Liquids and solids that can be ignited under almost all ambient temperature conditions.

Reactivity 0: Normally stable, even under fire exposure conditions, and is not reactive with water.



HMIS III Rating

Health 1: Irritation or minor reversible injury possible.

Flammability 3: Materials capable of ignition under almost all normal temperature conditions.

Physical Hazard 0: Materials that are normally stable.

Personal Protection H

B-15	
Health	1
Flammability	3
Physical Hazard	0
Personal Protection	H

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END OF SAFETY DATA SHEET