Rocky Mountain Reagents
SCIENTIFIC SOLUTIONS SINCE 1951

SDS

Safety Data Sheet

1. IDENTIFICATION

Product Identifier: **Lactophenol Cotton Blue**

Product Code(s): L1000

Synonyms: Mixture

Recommended Use: For manufacturing, industrial, and laboratory use only.

Uses Advised Against: Not for food, drug, or household use.

Supplier:
Rocky Mountain Reagents, Inc.
4621 Technology Drive, Golden, CO 80403
Phone: (303) 762-0800 Fax: (303) 762-1240

Emergency Phone Number: (800) 255-3924 (VelocityEHS)

2. HAZARDS IDENTIFICATION

Hazard Classifications:

Acute Toxicity – Oral:	Category 4
Acute Toxicity – Inhalation:	Category 4
Skin Corrosion/Irritation:	Category 1B
Eye Damage/Irritation:	Category 1
Germ Cell Mutagenicity:	Category 2
Specific Target Organ Toxicity (Repeated Exposure):	Category 2

Signal Word: DANGER

Hazard Statements:
Harmful if swallowed.
Harmful if inhaled.
Causes severe skin burns and serious eye damage.
Suspected of causing genetic defects.
May cause damage to organs through prolonged or repeated exposure.

Pictograms:



Precautionary Statements:

Prevention:
Wash thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Do not breathe fumes, mists, vapors, or spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, eye protection, and face protection.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Response:
Immediately call a poison center or doctor.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Wash contaminated clothing before reuse.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical attention.

Storage:
Store locked up.

Disposal:
Disposal of contents and container in accordance with local, regional, national, and international regulations.

Hazards Not Otherwise Classified:
Not applicable.

Toxicity Statement:
This product contains >1% ingredients whose acute toxicity is unknown.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	Common Name / Synonyms	CAS#	Chemical Formula	% by Weight
Water	-	7732-18-5	H_2O	18.1
Glycerin	Glycerol	56-81-5	$C_3H_8O_3$	41.9
Lactic Acid	2-Hydroxypropionic Acid	50-21-5	$C_3H_6O_3$	21.9
Phenol	Hydroxybenzene	108-95-2	C_6H_6O	18.1
Methyl Blue	Cotton Blue	28983-56-4	$Na_2C_{37}H_{27}N_3O_9S_3$	0.0453

Trade Secret Statement:
Not applicable.

4. FIRST AID MEASURES

First Aid Procedures:

Inhalation:
Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediately call a poison center or doctor.

Ingestion:
Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor.

Skin Contact:
Remove contaminated clothing and shoes. Wash skin with plenty of water for at least 15 minutes. Wash clothing before reuse. Immediately call a poison center or doctor.

Eye Contact: Check for and remove contact lenses if present and easy to do. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Immediately call a poison center or doctor.

General Advice: Ensure that medical personnel and those providing first aid are aware of the material(s) involved and take precautions to protect themselves.

Symptoms and Effects: Irritation, burns, nausea, vomiting, diarrhea, abdominal pain, coughing, shortness of breath, nervous system effects. Harmful if swallowed. May cause irritation or burns to the eyes, skin, respiratory tract, and gastrointestinal tract. May affect the nervous system, respiratory system, and circulatory system. Prolonged or repeated exposure may affect the liver, kidneys, bladder, brain, endocrine system, and immune system.

Immediate Medical Care/ Special Treatment: Immediately call a poison center or doctor. Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media: Water spray, dry powder, alcohol resistant foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream, as it may scatter and spread fire.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, sodium oxides, sulfur oxides, toxic fumes.

Specific Hazards: Excessive thermal conditions may cause decomposition and yield hazardous decomposition products listed above.

Special Protective Equipment/ Precautions for Firefighters: As in any fire, wear MSHA/NIOSH-approved (or equivalent), self-contained, positive-pressure or pressure-demand breathing apparatus and full protective gear. In the event of fire and/or explosion, do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment: Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Wear appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin, and clothing.

Emergency Procedures: In case of chemical emergency, or if unsure how to address an accidental release, consult a professional (see Section 1).

Methods for Containment: Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements, or confined areas. Dike the spilled material, where this is possible. Product should not be released to the environment. Contain and recover liquid when possible.

Methods for Cleanup: Absorb spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, or fleece) and place in a noncombustible container for reclamation or disposal. Do not flush to sewer. Clean contaminated surface thoroughly. Spills can be dissolved with alcohol or acetone solution. Never return spills in original containers for reuse. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes, and clothing. Do not breathe vapors or spray mist. Do not ingest. When using, do not eat, drink, or smoke. Keep away from incompatible materials (see Section 10). Handle in accordance with good industrial hygiene and safety practice.

Wash thoroughly after handling. Containers of this material may be hazardous when empty, as they retain product residues. Observe all warnings and precautions listed for this product.

Storage: Store in a cool, dry, ventilated area. Store away from incompatible materials (see Section 10). Store in original container. Keep containers tightly closed and upright. Keep away from food, drink, and animal foodstuffs. Keep out of the reach of children. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of this product.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:

Water:	No information found.	
Glycerin:	ACGIH: TLV:	10 mg/m^3
	OSHA: PEL:	15 mg/m^3
Lactic Acid:	No information found.	
Phenol:	ACGIH: TLV:	5 mg/m^3
	OSHA: PEL:	19 mg/m^3
	NIOSH: CEIL:	60 mg/m^3
Methyl Blue:	No information found.	

Engineering Controls: Ensure adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Measures:

Eye/Face Protection: Wear safety glasses with side shields or goggles and a face shield. Maintain approved eye wash station and accessible rinse facilities in work area.

Skin Protection: Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves.

Respiratory Protection: An air-purifying, NIOSH-approved respirator with appropriate cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive-pressure, air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are unknown, or if any other circumstances exist where air-purifying respirators may not provide adequate protection.

Specific Requirements for Personal Protective Ensure that glove material is compatible with this product. This information is available from glove manufacturers.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue, opaque liquid.

Odor: Mild, phenolic.

Odor Threshold: No information found.

Formula Weight: Mixture.

pH: No information found.

Melting/Freezing Point:	< 20 °C
Boiling Point/Range:	> 100 °C
Decomposition Temperature:	No information found.
Flash Point:	Not applicable.
Auto-ignition Temperature:	Not applicable.
Flammability:	Not flammable or explosive.
Flammability/Explosive Limits:	Not applicable.
Solubility:	Miscible with water.
Vapor Pressure:	No information found.
Vapor Density:	No information found.
Specific Gravity:	1.01 (Water = 1)
Evaporation Rate:	No information found.
Viscosity:	No information found.
Partition Coefficient (n-octanol/water):	No information found.

10. STABILITY AND REACTIVITY

Reactivity Data:	No information found.
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat, incompatible materials.
Incompatible Materials:	Oxidizing agents, strong acids, strong bases.
Hazardous Decomposition Products:	Carbon oxides, nitrogen oxides, sodium oxides, sulfur oxides, toxic fumes.
Possibility of Hazardous Reactions:	May react vigorously or violently if exposed to extreme thermal conditions or if contacted with the incompatible materials listed above.
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure:	Inhalation, ingestion, skin contact, eye contact.
Acute Effects:	Harmful if swallowed. May cause irritation or burns to the eyes, skin, respiratory tract, and gastrointestinal tract. May affect the nervous system, respiratory system, and circulatory system.
Chronic Effects:	Prolonged or repeated exposure may affect the liver, kidneys, bladder, brain, endocrine system, and immune system.
Toxicological Data:	Water: No information found.

Glycerin:	LD50 Oral, Rat:	12,600 mg/kg
	LD50 Dermal, Rabbit:	> 10,000 mg/kg
	Causes mild eye and skin irritation based on animal data.	
Lactic Acid:	No information found.	
Phenol:	LD50 Oral, Rat:	317 mg/kg
	LD50 Dermal, Rabbit:	630 mg/kg
	LD50 Inhalation, Rat:	0.316 mg/L 4 h
	Causes severe skin and eye irritation based on animal data.	
	May cause mutagenic effects based on animal data.	
Methyl Blue:	No information found.	

Symptoms of Exposure: Irritation, burns, nausea, vomiting, diarrhea, abdominal pain, coughing, shortness of breath, nervous system effects.

Carcinogenic Effects: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC: Phenol: 3 – Not classifiable as to its carcinogenicity to humans.

ACGIH: Phenol: A4 – Not classifiable as a human carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicological Data:	Water:	No information found.
	Glycerin:	No information found.
	Lactic Acid:	No information found.
	Phenol:	No information found.
	Methyl Blue:	No information found.

Persistence and Degradability: May not be readily biodegradable.

Environmental Effects: May be hazardous to aquatic life and groundwater resources. Avoid release to the environment.

13. DISPOSAL INFORMATION

Disposal Instructions: All wastes must be handled in accordance with local, state, and federal regulations. Minimize exposure to product waste (see Section 8).

Contaminated Packaging: Because emptied containers retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities.

Waste Codes: D002: Waste Corrosive material (pH ≤ 2 or pH ≥12.5 or corrosive to steel)

14. TRANSPORT INFORMATION

DOT:

UN Number: UN2821

Proper Shipping Name: Phenol solutions

Hazard Class: 6.1

Packing Group: III

ERG Number: 153

Other Transport Precautions: No information found.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

OSHA: This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Inventory: All components of this product are on the U.S. TSCA Inventory.

U.S. EPCRA (SARA Title III):

Section 302: No information found.

Sections 311/312:

Hazard Category	List (Yes/No)
Section 311 – Hazardous Chemical	Yes
Immediate Hazard	Yes
Delayed Hazard	Yes
Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No

Section 313: Phenol

CERCLA Reportable Quantities: No information found.

International Inventories:

Country or Region	Inventory Name	On Inventory (Yes/No)*
Australia	Australian Inventory of Chemical Substances (AICS)	N/A
Canada	Domestic Substances List (DSL)	N/A
Canada	Non-Domestic Substances List (NDSL)	N/A
China	Inventory of Existing Chemical Substances in China (IECSC)	N/A
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	N/A
Europe	European List of Notified Chemical Substances (ELINCS)	N/A
Japan	Inventory of Existing and New Chemical Substances (ENCS)	N/A
Korea	Existing Chemicals List (ECL)	N/A
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	N/A

*A "Yes" indicates that the listed component(s) of this product comply with the inventory requirements administered by the governing country(s)

16. OTHER INFORMATION

Disclaimer: Rocky Mountain Reagents, Inc. provides the information in this Safety Data Sheet in the belief that it is reliable but assumes no responsibility for its completeness or accuracy. The physical properties reported in this SDS are obtained from literature and do not constitute product specifications. Rocky Mountain Reagents, Inc. makes and gives no representations or warranties with respect to the information contained herein or the product to which it refers, whether express, implied, or statutory, including without limitation, warranties of accuracy, completeness, merchantability, non-infringement, performance, safety, suitability, stability, and fitness for a particular purpose. No warranty against infringement of any patent, copyright or trademark is made or implied. This SDS is intended only as a guide to the appropriate handling of the material by a properly trained person. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. Accordingly, Rocky Mountain Reagents, Inc. assumes no liability whatsoever for the use of or reliance upon this information including results obtained, incidental or consequential damages, or lost profits.

Issue Date: November 16, 2015

Reason for Revision: Not applicable.