



Centre Anti-Poison pour le Québec: (800) 463-5060

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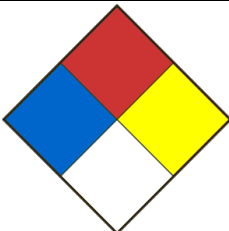
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier LACTOPHENOL BLUE SOLUTION (MYCOLOGY)		Product Use Laboratory use	
Chemical formula -		Product code LS-0405	Molar weight
Chemical name / Commercial name / Synonymous LACTOPHÉNOL BLEU COTON (MYCOLOGIE); LACTOPHENOL BLUE SOLUTION (MYCOLOGY); Lactophenol Anilin Blue; Bleu de lactophénol, Solution			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666 CENTRE ANTI-POISON DU QUÉBEC 800-463-5060		
Date SDS 7/28/2022	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Serious eye damage/eye irritation - Serious eye damage category 1 Specific Target Organ Toxicity - Single exposure category 2 Specific Target Organ Toxicity - Repeated exposure category 2 Germ cell mutagenicity category 2 Skin corrosion/irritation - Skin corrosion category 1
Signal Word	DANGER
Hazards statements (H)	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H341 Suspected of causing genetic defects . H371 May cause damage to organs. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (P)	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust / fume / gas / mist / vapors / spray. P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do no eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P311 IF exposed or concerned: Call a POISON CENTER or a doctor. P308 + P313 IF exposed or concerned: Get medical advice/attention. P310 Immediately call a POISON CENTER or doctor/physician. P314 Get medical advice/attention if you feel unwell. P321 Specific treatment (see section 4 of the SDS and on this label). P363 Wash contaminated clothing before reuse. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
PICTOGRAMS	
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Significant; 4=Extreme)
	Health 3 Fire 0 Reactivity 1 Special danger

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Phénol	108-95-2	1
Acide lactique	50-21-5	1
Glycérine	56-81-5	2
Bleu de méthyle	28983-56-4	0.5

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	If breathed in, move person into fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	If the person is conscious, give water to drink. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Main symptoms of high exposure: Skin, eye and respiratory system irritation. Kidney damage. Liver damage. Skin. To our knowledge, the chemical, physical and toxicological properties have not been fully investigated. Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	It is not considered flammable, but can burn at high temperatures.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Data not available.
Hazardous combustion products	Hazardous combustion products formed under fire conditions: Carbon oxides. - Sulphur oxides, Sodium oxides. Nitrogen oxides (NOx). Ammonia.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapors, mist or gas. Do not let product enter drains.
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SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Store in a cool, dry place. Keep container tightly closed and store away from heat, air, moisture and incompatible products. Protect from sunlight and light. Store in a well-ventilated area.
Methods of handling	Avoid contact with the skin, eyes and clothes. Ensure good ventilation. Avoid ingestion and inhalation. Bottle in the glass preferably. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Phenol	108-95-2	TWA	5.000000 ppm 19.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Substance may be readily absorbed through intact skin			
		TWA	5.000000 ppm	Canada. British Columbia OEL
	Contributes significantly to the overall exposure by the skin route.			
		TWAEV	5.000000 ppm 19.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	Skin (percutaneous)			
		TWA	5.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
Components	CAS-No.	Value	Control parameters	Basis
Lactic acid	50-21-5	No data available	TLV, TWA, STEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		No data available	TLV, TWA, STEL	Canada. British Columbia OEL
		No data available	TLV, TWA, STEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Components	CAS-No.	Value	Control parameters	Basis
Glycerol	56-81-5	TWA	10.000000 mg/m3	Canada. British Columbia OEL
		TWA	3.000000 mg/m3	Canada. British Columbia OEL
		TWA	10.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		TWAEV	10.000000 mg/m3	Canada. Ontario OELs
		TWAEV	10 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWAEV	10.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure

				values for airborne contaminants
		TWA	10.000000 mg/m3	Canada. British Columbia OEL
		TWA	3.000000 mg/m3	Canada. British Columbia OEL
		TWA	10.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required				
		TWAEV	10.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	10.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
Components	CAS-No.	Value	Control parameters	Basis
Methyl blue	28983-56-4	No data available	TLV, TWA, STEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		No data available	TLV, TWA, STEL	Canada. British Columbia OEL
		No data available	TLV, TWA, STEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Use fan.
Respiratory	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters. Face shield (20 cm minimum).
Shoes	Safety shoes.
Clothing	Labcoat. Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.
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SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid.
Appearance	Liquide bleu.
Odour	Caractéristique.
Odour threshold	Data not available
pH	5-6.
Melting point / Freezing point	Data not available
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	Data not available
Solubility	Soluble dans l'eau.
Vapour density	Data not available
Relative density	1.013g/ml
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	May react violently with incompatible substances.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Stable under normal conditions.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid contact with incompatible materials and extreme temperatures. Heat, flames and sparks.
Incompatible material	When pure, the products react with the following products: Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), strong acids and bases, strong oxidants, alkalis, acetaldehyde, 1,3-butadiene, boron trifluoride, camphor, diethyletherate, calcium hypochlorite, formaldehyde, metals and their alloys, sodium nitrite, heat, air, moisture and light. Strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), acid chlorides, corroded steel, furfuryl alcohol, silver and its salts, bases, alkali metals, chlorate and sodium hypochlorite, heat and humidity. Glycerine can react with strong oxidizing agents (nitric acid, perchloric acid, peroxides, chlorates and perchlorates), strong bases, acetic anhydride, chromic anhydride, calcium hypochlorite, chlorine chromium oxide, phosphorus triiodide, potassium permanganate, sodium hydride.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Toxic vapors of carbon monoxide and dioxide. Ammonia. - nitrogen oxides (NOx), Sulphur oxides - Sodium oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

PHENOL

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation and severe burns that can lead to corneal ulceration and blindness.
- Skin	Severe irritation, burns and tissue ulcerations.
- Inhalation	Spasms, irritation and inflammation of the nose, throat and lungs. Edema of the larynx and bronchi. Chemical pneumonitis and pulmonary edema that can lead to death.
Acute toxicity (Ingestion)	Irritation and burning of the mouth, throat, esophagus and abdominal wall. Dysphagia, abdominal pain, cramps, diarrhea, melena, hematemesis, sweating, salivation, paleness, convulsions, cardiac arrhythmia, stupor, hypotension, unconsciousness, coma and can lead to death. Ingestion of 1.5 g is sufficient to cause death.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, vitiligo, nervous disorders, liver and kidney damage, chest pain, cough, dyspnoea, laryngitis, headache, diarrhea, dizziness, confusion, irritability, erythema, difficulty swallowing, sweating, salivation muscle weakness and pain, weight loss and loss of appetite, nausea and vomiting. Target organs: Liver. Kidney. Nervous system.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 340-650 mg/kg LD50 Dermal - Rabbit - 850-1400 mg/kg LD50 Dermal - Rat - 660 mg/kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 8 h - 900 mg/m3.

LACTIC ACID

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Causes eye irritation. May cause permanent eye damage.
- Skin	May be harmful if absorbed through the skin. Provoke a skin irritation.
- Inhalation	May be harmful if inhaled. Causes irritation of the respiratory system. May cause irritation of the mouth, throat and nasal passages.
Acute toxicity (Ingestion)	May be harmful if swallowed. May cause metabolic changes.
Chronic exposure effects / symptoms	To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 3543 mg/kg LD50 Dermal - Rabbit - 2000 mg/kg.
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 4h - 7.94 mg/L

GLYCERIN (GLYCEROL)

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	May cause eye irritation. May cause inflammation of the conjunctiva.
- Skin	May cause skin irritation.
- Inhalation	Irritation of the mucous membranes and respiratory tract.
Acute toxicity (Ingestion)	Irritation of the mucous membranes. Gastrointestinal disorders, cramps, diarrhea, headache, dizziness, convulsions, nausea and vomiting.
Chronic exposure effects / symptoms	Burning sensation, conjunctivitis, nervous disorders, headache, dizziness, tiredness, nausea and vomiting.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 12,600 mg/kg. LD50 Dermal - Rabbit - >10 000 mg/kg
CL50 (specify species and route of entry)	LC50 Inhalation - Rat - 1 h - > 570 mg/cu m

Routes of exposure	Inhalation. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation. To our knowledge, the product has not been fully studied.
- Skin	Irritation. To our knowledge, the product has not been fully studied.
- Inhalation	Harmfull if inhaled. Asthma. Breathing difficulties. To our knowledge, the product has not been fully studied.
Acute toxicity (Ingestion)	To our knowledge, the product has not been fully studied.
Chronic exposure effects / symptoms	Asthma - Reversible bronchoconstriction (narrowing of bronchioles) initiated by the inhalation of irritating or allergenic agents.
DL50 (specify species and route of entry)	LD50 Oral - Data not available; LD50 Dermal - Data not available.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SUMMARY

Acute exposure effects / Symptoms:	By exposure routes below.
Ingestion	To our knowledge, the product has not been fully evaluated
Inhalation	To our knowledge, the product has not been fully evaluated
Skin	To our knowledge, the product has not been fully evaluated
Eyes	To our knowledge, the product has not been fully evaluated
Chronic exposure effects / Symptoms:	To our knowledge, the product has not been fully evaluated
ETA Mix (Estimated Acute Toxicity)	LD50 Oral: > 5000 mg/kg - Rat LD50 Dermal: > 5000 mg/kg - Rabbit LC50 Inhalation: >10 000 mg/m3 - 4h - Rat

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Phenol: Toxicity to fish: LC50 - Leuciscus idus (Golden orfe) - 14.00 - 25.00 mg/l - 48 h CL50 - Carassius auratus (Gold fish) - 36.10 - 68.80 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 56 mg/l - 48 h Toxicity to algae: EC50 - Chlorella vulgaris (Fresh water algae) - 370.00 mg/l - 96 h Lactic acid: Toxicity to fish: LC50/48h/Fish = 320 mg/l Acute algae toxicity: 3.5 mg/L EC50 Pseudokirchneriella subcapitata 70 h
Persistence and degradability	Data not available.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Serious eye damage/eye irritation - Serious eye damage category 1 Specific Target Organ Toxicity - Single exposure category 2 Specific Target Organ Toxicity - Repeated exposure category 2 Germ cell mutagenicity category 2 Skin corrosion/irritation - Skin corrosion category 1
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SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Last Update: 7/28/2022