

Infosafe No™ 3CHEY Issue Date : February 2018 RE-ISSUED by ACR

Product Name : **LACTOPHENOL COTTON BLUE STAIN**

Classified as hazardous

## 1. Identification

**GHS Product Identifier** LACTOPHENOL COTTON BLUE STAIN  
**Product Code** 0323  
**Company Name** AUSTRALIAN CHEMICAL REAGENTS (ACR) (ABN 19 008 264 211)  
**Address** 38 - 50 Bedford Street Gillman  
 S.A. 5013 Australia  
**Telephone/Fax Number** Tel: (08) 8440 2000  
 Fax: (08) 8440 2001  
**Recommended use of the chemical and restrictions on use** Lactophenol Cotton Blue Solution is a mounting medium and staining agent used in the preparation of slides for microscopic examination of fungi.  
**Other Information** EMERGENCY CONTACT NUMBER: +61 08 8440 2000  
 Business hours: 8:30am to 5:00pm, Monday to Friday.

Australian Chemical Reagents (ACR) does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Australian Chemical Reagents (ACR) with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Australian Chemical Reagents (ACR) is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

## 2. Hazard Identification

**GHS classification of the substance/mixture** Acute Toxicity - Dermal: Category 3  
 Eye Damage/Irritation: Category 1  
 Germ Cell Mutagenicity: Category 2  
 Acute Toxicity - Inhalation: Category 3  
 Acute Toxicity - Oral: Category 3  
 Specific target organ toxicity - Repeated Exposure Category 2  
 Skin Corrosion/Irritation: Category 1A  
**Signal Word (s)** DANGER  
**Hazard Statement (s)** H301 Toxic if swallowed.  
 H311 Toxic in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H331 Toxic if inhaled.  
 H341 Suspected of causing genetic defects.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
**Pictogram (s)** Skull and crossbones, Health hazard, Corrosion



**Precautionary statement – Prevention** 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/vapours/spray.  
 P264 Wash 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.  
**Precautionary statement – Response** Swallowed  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 P330 Rinse mouth.

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**Precautionary statement – Storage**

**Precautionary statement – Disposal**

Skin  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P362 Take off contaminated clothing and wash before reuse.

Inhaled  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P310 Immediately call a POISON CENTER or doctor/physician.

Eye  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.

P308+P313 IF exposed or concerned: Get medical advice/attention.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/container to an approved waste disposal plant.

### 3. Composition/information on ingredients

<b>Composition, information on ingredients</b>	Constituent of coal tar and is formed during the natural decomposition of organic materials; in forest fires; and by atmospheric degradation of benzene in the presence of light; volatile component of liquid manure and is a normal metabolic by-product found in human tissues, urine, feces, saliva and sweat.			
<b>Chemical Characterization</b>	Solid			
<b>Ingredients</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>	<b>Hazard Symbol</b> <b>Risk Phrase</b>
	Glycerol	56-81-5	40 %	
	Phenol	108-95-2	20 %	
	Lactic acid	79-33-4	20 %	
	Methyl blue	28983-56-4	0-<1 %	
	Water to make a total of 100%	7732-18-5	-	

### 4. First-aid measures

**Inhalation** If inhaled, remove from contaminated area to fresh air immediately, avoid becoming a casualty. Make patient comfortable, keep warm and at rest until fully recovered. If breathing is difficult (or develops a bluish skin discolouration), supply oxygen by a qualified person. Apply artificial respiration with a respiratory medical device if not breathing. Do not use mouth to mouth resuscitation. Immediately medical attention is required.

**Ingestion** Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek immediate medical advice.

**Skin** Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek immediate medical advice /attention depending on the severity.

**Eye contact** If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical assistance.

**First Aid Facilities** Maintain eyewash fountain and safety shower in work area.

**Advice to Doctor** Treat symptomatically based on judgement of doctor and individual reactions of the patient.

**Other Information** For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

### 5. Fire-fighting measures

**Hazards from Combustion Products** Incomplete combustion may produce irritating fumes.

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<b>Specific Methods</b>	Use extinguishing media most appropriate for the surrounding fire. Small fire: Use dry chemical, CO2 or water spray. If safe to do so, move undamaged containers from fire area. Large fire: Use dry chemical, CO2, foam or water spray - Do not use water jets.
<b>Hazchem Code</b>	2X
<b>Precautions in connection with Fire</b>	Wear SCBA and chemical splash suit. Fully-encapsulating, gas-tight suits should be worn for maximum protection. Structural firefighter's uniform is NOT effective for these materials.

## 6. Accidental release measures

<b>Personal Precautions</b>	Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Personal Protection</b>	Wear protective clothing specified for normal operations (see Section 8)
<b>Clean-up Methods - Small Spillages</b>	Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum.

## 7. Handling and storage

<b>Precautions for Safe Handling</b>	Avoid contact with skin, eyes and clothing. Wear appropriate protective clothing, safety glasses, gloves. Wash hands and face thoroughly after working with material. Remove contaminated clothing and wash before re-use. Discard contaminated shoes. Avoid inhalation and ingestion. Under no circumstances eat, drink or smoke while handling this material. If ingested, seek medical advice immediately and show the container or the label. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid prolonged or repeated exposure.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed containers, in a cool, dry, ventilated area away from sources of heat, food or other chemicals.
<b>Storage Regulations</b>	Refer Australian Standard AS/NZS 4452:1997 'The storage and handling of toxic substances'.

## 8. Exposure controls/personal protection

Occupational exposure limit values	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
	Glycerol			10		As Glycerin mist
	Phenol			4	1	
<b>Other Exposure Information</b>	A time weighted average (TWA) has been established for Phenol (Safe Work Australia) of 4 mg/m <sup>3</sup> , (1 ppm). Note: Absorption through the skin may be a significant source of exposure. A time weighted average (TWA) has been established for Glycerol (Safe Work Australia) of 10 mg/m <sup>3</sup> , (As Glycerin mist).					
<b>Appropriate engineering controls</b>	The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.					
<b>Respiratory Protection</b>	Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.					
<b>Eye Protection</b>	The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate.					
<b>Hand Protection</b>	Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336. Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: Butyl rubber gloves Viton over Butyl unlined glove. Viton rubber					

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<b>Personal Protective Equipment</b>	gloves. Silver Shield gloves Final choice of personal protective equipment will depend on individual circumstances and/or according to risk assessments undertaken.
<b>Body Protection</b>	Clean impervious clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.
<b>Hygiene Measures</b>	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

## 9. Physical and chemical properties

<b>Form</b>	Solid
<b>Appearance</b>	Blue liquid.
<b>Odour</b>	Phenol - Distinct, sharp, medicinal, sweet, acrid, tarry odour.
<b>Solubility in Water</b>	Soluble.

## 10. Stability and reactivity

<b>Chemical Stability</b>	Stable under normal use conditons.
<b>Conditions to Avoid</b>	Excess heat.
<b>Incompatible Materials</b>	Oxidising agents and strong bases.
<b>Hazardous Polymerization</b>	Will not occur. Contact with alkali and metal hydroxides (e.g. aluminium hydroxide) or anhydrous metal chlorides (tin, iron, aluminium) may result in hazardous polymerization.

## 11. Toxicological Information

<b>Ingestion</b>	Phenol: Toxic if swallowed. Corrosive and causes severe irritation, swelling, burning pain in mouth and throat, burns and damage to the mouth, throat and stomach. May cause perforation of the digestive tract. Causes digestive tract burns with immediate pain, swelling of the throat, convulsions, and possible coma. Aspiration may lead to pulmonary oedema. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause muscular weakness, decreased blood pressure, irregular breathing, shock, collapse, unconsciousness, coma and possible death due to respiratory failure. Overexposure may cause methaemoglobinaemia. Methaemoglobinaemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discolouration of skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown coloured blood. May cause cardiac abnormalities. May cause kidney and liver damage. Death can occur rapidly following ingestion. Ingestion is not a typical route of occupational exposure.
<b>Inhalation</b>	Phenol: Toxic by inhalation. May cause severe irritation of nose, throat, respiratory tract and lungs with coughing, burns, breathing difficulty, and possible coma. Breathing vapour, dust or mist may result in digestive disturbances (vomiting, difficulty in swallowing, nausea, vomiting, diarrhoea, loss of appetite). May also cause pallor, weakness, darkened urine, headache, sweating, convulsions, cyanosis (bluish skin due to deficient oxygenation of the blood), unconsciousness, fatigue, pulmonary oedema and coma. Inhalation at high concentrations may cause CNS depression, asphixiation, and death.
<b>Skin</b>	Phenol: Toxic in contact with skin. Corrosive following skin contact. Skin contact and absorption is the most common route of occupational exposure. Repeated contact with dilute solutions or even brief contact with concentrated solutions can pose a risk to life. Direct skin contact results in white, wrinkled discolouration, followed by severe burns, but may be disguised by a loss in pain sensation due to local anesthetizing effects (can cause numbness or slight tingling). However, even minor contact can result in corrosive injury with burns, blisters, permanent skin damage and gangrene. Readily absorbed through the skin in all forms (solid, solutions and vapour) and can cause harmful effects. Signs and symptoms of phenol toxicity develop rapidly and include central nervous system effects, muscle weakness, tremors, loss of coordination, effects on the heart and blood vessels, shock, sudden collapse, coma, convulsions, lung and kidney damage and death. There are several reports of fatalities following extensive skin contact (greater than 25% of the skin surface) with concentrated phenol.
<b>Eye</b>	Phenol: Risk of serious damage to eyes. Corrosive to the eyes. Solutions can cause severe irritation, eye burns, redness, pain, blurred vision and permanent damage, including blindness. Vapours are irritating to eyes.
<b>Carcinogenicity</b>	Phenol [108-95-2] is evaluated in the IARC Monographs (Vol. 47, Vol. 71; 1999) as Group 3: Not classifiable as to carcinogenicity to humans.
<b>Chronic Effects</b>	Repeated or prolonged exposure to phenol by skin contact and inhalation of the aerosol may cause

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severe poisoning with symptoms such as vomiting, difficulty swallowing, diarrhoea, loss of appetite, headache, fainting, dizziness, mental disturbances and dark colouration of the urine. Skin discolouration and eruptions may also be produced. This condition is sometimes referred to as 'marasmus'. Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. Effects may be delayed. Repeated skin contact may cause dermatitis with dark pigmentation of the skin. Chronic exposures have been reported to cause death from liver and kidney damage.

## 12. Ecological information

<b>Ecotoxicity</b>	Toxic for aquatic organisms. Toxic effect on fish and plankton. Forms toxic mixtures in water, dilution measures notwithstanding. Change in the flavour characteristics of fish protein. Endangers drinking-water supplies if allowed to enter soil or water.
<b>Environmental Protection</b>	Do not allow to enter waters, waste water, or soil!

## 13. Disposal considerations

<b>Disposal Considerations</b>	Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.
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## 14. Transport information

<b>Transport Information</b>	Dangerous Goods of Class 6 (Toxic and Infectious Substances) are incompatible in a placard load with any of the following: -Class 1, Class 3, if the Class 3 dangerous goods are nitromethane, Class 8, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids; and are incompatible with food and food packaging in any quantity.
<b>U.N. Number</b>	2810
<b>UN proper shipping name</b>	TOXIC LIQUID, ORGANIC, N.O.S. - (Contains phenol 20%)
<b>Transport hazard class(es)</b>	6.1
<b>Hazchem Code</b>	2X
<b>Packaging Method</b>	3.8.6.1RT7,RT8
<b>Packing Group</b>	II
<b>EPG Number</b>	6A1
<b>IERG Number</b>	36

## 15. Regulatory information

<b>Regulatory Information</b>	Listed in the Australian Inventory of Chemical Substances (AICS). Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
<b>Poisons Schedule</b>	S6

## 16. Other Information

<b>Literature References</b>	'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia. Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997. National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007. Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', 2011. Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010. Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'. Safe Work Australia, 'Hazardous Substances Information System, 2005'. Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances (2011)'. Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995) 3rd Edition]'. <b>Contact Person/Point</b> Paul McCarthy Ph. (08) 8440 2000 <b>DISCLAIMER STATEMENT:</b> All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make
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