Straidiagnostics Incorporated Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 10 NOV 2022

SECTION 1: Identification of the sub	stance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Trade name	: Lacto-phenol cotton blue
Product code	: 6701-01, 6701-04, 6701-16, 6701-30
1.2. Relevant identified uses of the subs	tance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Laboratory use
1.2.2. Uses advised against	
No additional information available	
1.3. Supplier	
Astral Diagnostics Inc. Logan Township NJ 08085 - United States T +1 856 224 0900 800-441-0366 Technical Service; Monday-Friday www.ethosbiosciences.com	r: 8:00AM-5:00 PM, Eastern US Time
1.4. Emergency telephone number	
	: 800-424-9300 CHEMTREC (USA) 24 Hours/Day, 7 Days/Week
SECTION 2: Hazards identification	
2.1. Classification of the substance or m	ixture
GHS-US Classification	
Acute toxicity (oral), Category 4 Acute toxicity (inhalation), Category 4 Skin corrosion/irritation, Category 1B Serious eye damage, Category 1 Germ cell mutagenicity, Category 2	H302 H332 H314 H318 H341
Full text of H statements : see section 16	
2.2. GHS Label elements, including prec	autionary statements
GHS-US Labeling	,
Hazard pictograms (GHS-US)	
	GHS05 GHS06
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	 H302+H332 - Harmful if swallowed or if inhaled H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage H341 - Suspected of causing genetic defects H411 - Toxic to aquatic life with long lasting effects
Precautionary statements	: P260 - Do not breathe dust/fume/gas/mist/vapors/spray
(GHS-US)	 P200 - Do not breatile dustrume/gas/mist/vapors/spray P203 - Obtain, read and follow all safety instructions before use. P264+P265 - Wash hands, forearms and face thoroughly after handling. Do not touch eyes. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician P391 - Collect spillage. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation
10 NOV 2022	EN (English) 1/8

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 10 NOV 2022

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Phenol (solild)	(CAS No) 108-95-2	19	Acute Tox. 3 (Oral), H301; Acute Tox. 3 (Dermal), H311; Acute Tox. 3 (Inhalation), H331; Acute Tox. 3 (Inhalation:dust,mist), H331; Skin Corr. 1B, H314; Muta. 2, H341; STOT RE 2, H373
Lactic acid	(CAS No) 79-33-4	20	Skin Irrit. 2, H315 Eye Dam. 1, H318
Aniline blue	(CAS No) 28631-66-5	<1	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335
Glycerine (glycerol)	(CAS No) 56-81-5	40	Not classified.
Water	(CAS-No.) 7732-18-5	Balance	Not classified.

Full text of H-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. When symptoms occur: go into open air and ventilate suspected area. If you feel unwell, seek medical advice. Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Induce vomiting if victim completely conscious/alert. Call a physician immediately.
4.2. Most important symptoms and eff	ects, both acute and delayed
No additional information available	

4.3. Indication of any immediate medical attention and special treatment needed No additional information available

SECT	ION 5: Firefighting measure	S
5.1.	Extinguishing media	
Suitable	e extinguishing media	: Water spray. Foam. Dry powder. Carbon dioxide. Sand.
5.2.	Special hazards arising from the	substance or mixture
Fire ha	zard	: Combustible liquid.
5.3.	Advice for firefighters	
Precau	tionary measures fire	: Stop leak if safe to do so.
Protect	ion during firefighting	: Do not attempt to take action without suitable protective equipment.
Other in	nformation	: Combustible.

SECT	SECTION 6: Accidental release measures			
6.1.	Personal precautions, protective ed	quipment and emergency procedures		
General	measures	: Do not inhale vapor. Remove ignition sources.		
<mark>6.1.1.</mark> Emerge	For non-emergency personnel ncy procedures	: Do not breathe vapors.		

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 10 NOV 2022

Revision date: 10 NOV 2022	
6.1.2. For emergency responders	
Protective equipment	Use personal protective equipment as required. Do not attempt to take action without suitable protective equipment.
Emergency procedures	Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment. Prevent entry to	sewers and public waters.
6.3. Methods and material for containmen	t and cleaning up
For containment	Collect spillage.
Methods for cleaning up	Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation. Absorb spillage to prevent material damage. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage.
Other information	Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
No additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	Ensure good ventilation of the work station. Do not eat, drink or smoke when using this product.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Remove contaminated clothes.
7.2. Conditions for safe storage, including	
·	Heat sources. Sources of ignition. Direct sunlight.
Storage area	Store away from heat. Store in a well-ventilated place.
Special rules on packaging	Keep only in original container. Store in a closed container.
7.3. Specific end use(s)	
Laboratory chemicals.	
SECTION 8: Exposure controls/perso	nal protection
SECTION 8: Exposure controls/person 8.1. Control parameters	nal protection
8.1. Control parameters Lacto-Phenol Cotton Blue	nal protection
8.1. Control parameters	nal protection
8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2)	nal protection
8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available	
8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2)	nal protection
8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm]	
8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA	19 mg/m ³
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1]	19 mg/m ³ 5 ppm 19 mg/m ³
8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits	19 mg/m ³ 5 ppm
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1] OSHA PEL (TWA) [2] USA - IDLH - Occupational Exposure Limits 	19 mg/m ³ 5 ppm 19 mg/m ³ 5 ppm
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1] OSHA PEL (TWA) [2] 	19 mg/m ³ 5 ppm 19 mg/m ³
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1] OSHA PEL (TWA) [2] USA - IDLH - Occupational Exposure Limits 	19 mg/m ³ 5 ppm 19 mg/m ³ 5 ppm
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1] OSHA PEL (TWA) [2] USA - IDLH - Occupational Exposure Limits IDLH [ppm] 	19 mg/m ³ 5 ppm 19 mg/m ³ 5 ppm
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1] OSHA PEL (TWA) [2] USA - IDLH - Occupational Exposure Limits IDLH [ppm] USA - NIOSH - Occupational Exposure Limits 	19 mg/m ³ 5 ppm 19 mg/m ³ 5 ppm 250 ppm
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1] OSHA PEL (TWA) [2] USA - IDLH - Occupational Exposure Limits IDLH [ppm] USA - NIOSH - Occupational Exposure Limits NIOSH REL (TWA) 	19 mg/m ³ 5 ppm 19 mg/m ³ 5 ppm 250 ppm 19 mg/m ³
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1] OSHA PEL (TWA) [2] USA - IDLH - Occupational Exposure Limits IDLH [ppm] USA - NIOSH - Occupational Exposure Limits NIOSH REL (TWA) NIOSH REL TWA [ppm] 	19 mg/m³ 5 ppm 19 mg/m³ 5 ppm 250 ppm 19 mg/m³ 5 ppm
 8.1. Control parameters Lacto-Phenol Cotton Blue No additional information available Phenol (108-95-2) USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA ACGIH OEL TWA [ppm] USA - OSHA - Occupational Exposure Limits OSHA PEL (TWA) [1] OSHA PEL (TWA) [2] USA - IDLH - Occupational Exposure Limits IDLH [ppm] USA - NIOSH - Occupational Exposure Limits NIOSH REL (TWA) NIOSH REL TWA [ppm] NIOSH REL (Ceiling) 	19 mg/m³ 5 ppm 19 mg/m³ 5 ppm 250 ppm 19 mg/m³ 5 ppm 0 19 mg/m³ 5 ppm

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 10 NOV 2022

Glycerine (56-81-5)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA*	19 mg/m³	
ACGIH OEL TWA [ppm]* 5 ppm		
USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [1]	5 mg/m³ (respirable)	
OSHA PEL (TWA) [2]	15 mg/m³ (total dust)	

*Withdrawn in 2013 due to insufficient data relevant to human occupational exposure.

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Do not inhale vapor.

Hand protection:

protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Other information:

Do not eat, drink or smoke during use. Wash hands with water as a precaution.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Appearance	: Liquid	
Color	: Blue	
Odor	: characteristic	
Odor threshold	: No data available	
рН	: 2.3	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapor pressure	: No data available	
Relative vapor density at 20 °C	: No data available	
Relative density	: 1.172	
Solubility	: Miscible in water	
Log Pow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	
Explosive limits	: No data available	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 10 NOV 2022

9.2. Other information

No additional information available

SECT	ON 10: Stability and reactivity		
10.1.	Reactivity		
No addi	ional information available		
10.2.	Chemical stability		
Stable u	nder normal conditions.		
10.3.	Possibility of hazardous reactions		
No addi	ional information available		
10.4.	Conditions to avoid		
Oxidizir	g agents. Halogens.		
10.5.	Incompatible materials		
No addi	ional information available		
10.6.	Hazardous decomposition products		
N	in and information of all all a		

No additional information available

SECTION 11: Toxicological information		
11.1. Information on toxicological	effects	
Acute toxicity	: Oral: Harmful if swallowed. Dermal: Harmful in contact with skin.	
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 2.3	
Serious eye damage/irritation	: Serious eye damage, Category 1 pH: 2.3	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general	: Toxic to aquatic life. Toxic to soil organisms.	
Lacto-Phenol Cotton Blue		
LC50 fish 1	14 - 25 mg/l leuciscus Idus	

12.2. Persistence and degradability

Lacto-Phenol Cotton Blue	
Persistence and degradability	Product is biodegradable.
Biochemical oxygen demand (BOD)	1,4 - 1,68 g O ₂ /g substance
ThOD	2,26 - 2,4 g O ₂ /g substance

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 10 NOV 2022

12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessmen	•
No additional information available	t .
12.6. Other adverse effects	. Manine well-should
Other adverse effects	: Marine pollutant.
SECTION 13: Disposal considerations	S
13.1. Waste treatment methods	
Regional legislation (waste)	: Disposal must be done according to official regulations.
SECTION 14: Transport information	
Department of Transportation (DOT)	
In accordance with DOT	
Transport document description	: UN2821 Phenol solutions, 6.1, III
UN-No.(DOT)	: UN2821 : Phenol solutions
Proper Shipping Name (DOT) Class (DOT)	: 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Packing group (DOT)	: III - Minor Danger
Hazard labels (DOT)	: 6.1 - Poison
	POISON
	6
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Special Provisions (49 CFR 172.102)	: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite
	(31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids
	with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table
	2 for UN2672).
	T4 - 2.65 178.274(d)(2) Normal 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the
	following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature
	during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 153
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	. 00 L
DOT Quantity Limitations Cargo aircraft only (49	: 220 L
CFR 175.75)	
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a
Emergency Response Guide (ERG) Number	passenger vessel. : 153
Other information	: No supplementary information available.
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 10 NOV 2022

Transportation of Dangerous Goods

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15:	Regulatory information
15.1. US Federal	regulations

Phenol, solid (108-95-2)			
Not listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313			
CERCLA RQ	1000 lb		
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb		
SARA Section 302 Threshold Planning Quantity (TPQ)	10000 lb 500lb if the substance is solid in powder form with particle size less than 100 microns, or is in solution or molten form		

15.2. International regulations

CANADA

Phenol (108-95-2)
Listed on the Canadian DSL (Domestic Substances List)
Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Initial date	: 11 DEC 2013
Revision date	: 10 NOV 2022

Full text of H-statements

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H341	Suspected of causing genetic defects
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 10 NOV 2022

Hazard Rating	
Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given	;
Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)	;,
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.	ТС
Personal protection : J - Splash goggles, Gloves, Synthetic apron, Dust & vapor respirator	

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS US (GHS HazCom 2012)

Ethos Biosciences/Astral Diagnostics provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. Ethos Biosciences/Astral Diagnostics . makes no representations or warranties, either expressed or implied of merchantability, fitness for particular purposes with respect to the information set forth herein or to which the information refers. Accordingly, Ethos Biosciences/Astral Diagnostics will not be responsible for damages resulting from the use of or reliance upon this information.