Camlab Limited – Material Safety Data Sheet 1111206

1. Identification

Product Code **1111206**

Product Name **PHENOL SOLUTION 80% w/w**

Molecular Formula **C_6H_5OH =94.11**

CAS Number **108-95-2**

Supplier: **CAMLAB LIMITED**

Norman Way Industrial Estate
Over
Cambridge
England
CB4 5WE

Phone **01954 233110**
Fax **01954 233101**

Emergency Telephone **08:00-17:00 01954 233110**
24hr 112
(Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Phenol	108-95-2	203-632-7	80.0%	T C : R23/24/25,R34,R48/20/21/22, R68	WEL

3. Hazards Identification

Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Harmful: danger of serious damage to health by prolonged exposure through inhalation, contact with skin and if swallowed. Possible risk of irreversible effects.

4. First Aid Measures

Eyes: Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.

Skin: Remove contaminated clothing immediately avoiding contamination of unaffected areas. Swab contaminated skin with a mixture of 70 parts polyethylene glycol and 30 parts alcohol. Alternatively use glycerol or polyethylene glycol, or if solvents are not available flush with water for at least 10 minutes. OBTAIN MEDICAL ATTENTION URGENTLY.

Inhalation: Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION.

Ingestion: If conscious give plenty of water to drink. Do not induce vomiting. Convulsions may occur and cause unconsciousness. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.

5. Fire Fighting Measures

Hazards: Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. Vapour-air mixtures are explosive.

Extinguishing Media: Water spray, alcohol resistant foam, dry powder or carbon dioxide. Use water spray to keep fire exposed containers cool.

Unsuitable Media: Do not use water jet.

6. Accidental Release Measures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.
Enviromental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
Major Spillage	If molten allow to solidify first. Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.
Storage Conditions	Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents.

8.1 Workplace Exposure Limits

Component	CAS No	Workplace Exposure Limits				Maximum Exposure Limits			
		Long Term		Short Term		Long Term		Short Term	
		ppm	mg m–3	ppm	mg m–3	ppm	mg m–3	ppm	mg m–3
Phenol	108-95-2	2.000	–	–	–	–	–	–	–

8.2 Personal Protection

Respiratory	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hands	Use PVC gauntlets.
Eyes	Use chemical full face shield.
Skin	Wear PVC oversuit.

9. Physical & Chemical Properties

Appearance	Clear colourless to pale coloured liquid or frozen mass.
Odour	Distinctive, sweet tarry odour and burning taste.
pH	6 @ 20 °C
Boiling point	Aqueous solution
Melting point	5.0 °CAqueous solution
Flash point	80.0 °C(Closed cup)
Upper Flammable Limit	8.6 %
Lower Flammable Limit	1.7 %
Auto Ignition	715.0 °C
Explosive properties	Slight.
Oxidising Properties	No.
Vapour Presure	0.35 mm Hg @25,C
Relative Density	1.1320
Water Solubility	Completely soluble in water.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
Materials to Avoid	Acetaldehyde. Aluminium chloride plus nitro benzene or nitromethane. Sodium nitrite.

10. Stability & Reactivity (continued)

Hazardous Decomposition Products	None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

11. Toxicological Information

Eyes	The solid, molten liquid and solutions are irritating to the eyes. Damage can range from severe irritation and corneal scarring to permanent blindness.
Skin	Toxic when absorbed through skin. The solid, molten liquid and solutions will cause severe burns. Because of its local anaesthetic effect, skin burns may be painless. Even small amounts may lead rapidly to a state of collapse. Symptoms include, profuse sweating, vomiting, cyanosis, convulsions, leading to coma and respiratory failure. Death can occur from exposure to as little as 400 cm2 of unprotected skin.
LD50 Skin	Rabbit 2000 mg/Kg
Ingest	Toxic if swallowed. Causes severe corrosion of the mouth, throat and gastro-intestinal tract. Ingestion may prove fatal.
LD50 Ingest	Rat 414 mg/Kg
Inhalation	Toxic by inhalation. Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes, nose, throat and respiratory tract. High concentrations of vapour may cause digestive and nervous disorders, pulmonary oedema or liver and kidney failure.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	May be a mutagen.
Reproductive Effects	An increased incidence of preimplantation loss and early postnatal deaths have been reported in the offspring of rats exposed to the vapour throughout pregnancy.

12. Ecological

Slightly toxic to aquatic species but will bioaccumulate.

13. Disposal Considerations

Disposal Methods	Dispose of in a licensed incinerator. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems.
Contaminated Packaging	Clean out with a weak sodium hydroxide solution then wash out thoroughly with water. Use a licensed waste disposer.

14. Transport Information

Proper Shipping Name	Phenol solution
UN Number	2821
UN Classification	6.1 Toxic
Subsidiary Risk	None
Flash Point	80.0 °C(Closed cup)
Packing Group	II
Transport Category	2
Marine pollutant	No
ADR Hazard ID	60

15. Regulatory Information

Labelling Classification	Toxic, Corrosive.
Label Symbols	T C

15. Regulatory Information (continued)S45

Risk & safety Phrases	Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Harmful: danger of serious damage to health by prolonged exposure through inhalation, contact with skin and if swallowed. Possible risk of irreversible effects. Keep locked up and out of reach of children. After contact with skin, wash immediately with plenty of water. In case of accident or if you feel unwell, seek medical advice immediately (show the label).
EEC Number	203-632-7

16. Other Information

Document Information	This document has been prepared in accordance with directive 88/379/EEC. The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. Revision Date: 17/06/05. Data reviewed and PDF file generated: 17/03/10.