Scientific Laboratory Supplies - Safety Data Sheet CHE2832

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 16 April 2021
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Section 1. Identification

1.1 Product Identifier CHE2832

Product Name PHENOL SOLUTION 80% w/w 500ml.

CAS Number 108-95-2
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula C_6H_5OH =94.11

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Scientific Laboratory Supplies

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NG11 2AF
UNITED KINGDOM

Phone 0115 9821111
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(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Acute toxicity, category 3 (oral)	H301: Toxic if swallowed.
Acute toxicity, category 3 (dermal)	H311: Toxic in contact with skin.
Skin corrosion/irritation, category 1B	H314: Causes severe skin burns and eye damage.
Acute toxicity, category 3 (inhalation)	H331: Toxic if inhaled.
Germ cell mutagenicity, category 2	H341: Suspected of causing genetic defects.
Spec target organ tox - repeat, category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Hazard to aquatic environment, category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements	Suspected of causing genetic defects. Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed. May cause damage to organs through prolonged or repeated exposure. Causes severe skin burns and eye damage. Toxic to aquatic life with long lasting effects.
Precautionary Statements	Do not breathe fumes. Wear protective gloves / protective clothing / eye protection / face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician. Avoid release to the environment.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Phenol	108-95-2	203-632-7	01-2119471329-32-XXXX	80%	Acute Tox. 3 (O),Acute Tox. 3 (D),Skin Corr. 1B,Acute Tox. 3 (I),Muta. 2,STOT RE 2,Aquatic Chronic 2

Section 4. First Aid

4.1 Description of 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.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

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.

5.2 Special hazards arising from the substance or mixture

Hazards	Vapour-air mixtures are explosive.

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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.

6.2 Environmental precautions

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.

6.3 Methods and material for containment and cleaning up

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.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

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.

7.2 Conditions for safe storage, including any incompatibilities

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.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Phenol	108-95-2	80%	2.0 ppm	8.0 mg/m-3	4.0 ppm	16.0 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	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.
Hand Protection	Use PVC gauntlets.
Eye Protection	Use chemical full face shield.
Skin Protection	Wear PVC oversuit.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and 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°C
Flash Point	80°C (Closed cup)
Upper Flammable Limit	8.6%
Lower Flammable Limit	1.7%
Auto Ignition	715°C
Explosive Properties	Slight.
Oxidising Properties	No.
Vapour Pressure	0.35mmHg @ 25°C
Relative Density	1.1320
Water Solubility	Completely soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatable Materials	Acetaldehyde. Aluminium chloride plus nitro benzene or nitromethane. Sodium nitrite.
10.6	Hazardous Decomposition Products	None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

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	660mg/kg Rabbit
Ingestion	Toxic if swallowed. Causes severe corrosion of the mouth, throat and gastro-intestinal tract. Ingestion may prove fatal.
LD50 Oral	340mg/kg Rat
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.
LD50 Inhalation	>900mg/m3 Rat (8 hours)
TCLo	Not available
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.

Section 12. Ecological

12.1	Toxicity	Toxic to aquatic life with long lasting effects.
	LC50 Algal	61.1mg/l Algae (96 hours)
	LC50 Crustacea	3.1mg/l Daphnia (48 hours)
	LC50 Fish	8.9mg/l Rainbow Trout (96 hours)

12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

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.

Section 14. Transport Information

14.1	**UN Number**	2821
14.2	**Proper Shipping Name**	Phenol solution
14.3	**Transport classes**	
	UN classification	6.1
	Subsidiary hazard(s)	None
	Transport category	2
	ADR Hazard ID	60
	Tunnel Restriction Code	D/E
14.4	**Packing Group**	II
14.5	**Environment hazards**	See section 12.
14.6	**Special precautions for user**	No special precautions required.
14.7	**Transport in bulk**	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Acute toxicity, category 3 (oral); Acute toxicity, category 3 (dermal); Skin corrosion/irritation, category 1B; Acute toxicity, category 3 (inhalation); Germ cell mutagenicity, category 2; Spec target organ tox - repeat, category 2; Hazard to aquatic environment, category 2
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H341, H331, H311, H301, H373, H314, H411 Suspected of causing genetic defects. Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed. May cause damage to organs through prolonged or repeated exposure. Causes severe skin burns and eye damage. Toxic to aquatic life with long lasting effects.
Precautionary Statements	P260, P280, P303+P361+P353, P305+P351+P338, P309+P311, P273 Do not breathe fumes. Wear protective gloves / protective clothing / eye protection / face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician. Avoid release to the environment.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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