

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 03.03.2015

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Phenol, Liquified

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Phenol, Liquified

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25463

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Toxic

Acute toxicity (oral, dermal, inhalation), category 3



Corrosive

Skin corrosion, category 1B
Serious eye damage, category 1



Health hazard

Germ cell mutagenicity, category 2
Specific target organ toxicity following repeated exposure, category 2



Environmentally Damaging

Chronic hazards to the aquatic environment, category 3

Ac. Oral Tox. 3

Aq. ChrTox. 2

Ac. Inhal Tox. 3

Ac. Dermal Tox. 3

Skin Corr. 1B

Eye. Damage 1

Germ Cell

STOT RE 2

Aq. AcTox. 3

Signal word :Danger

Hazard statements:

Toxic if swallowed

Toxic in contact with skin

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Causes severe skin burns and eye damage

Toxic if inhaled

Suspected of causing genetic defects

May cause damage to organs through prolonged or repeated exposure

Causes serious eye damage

Harmful to aquatic life

Toxic to aquatic life with long lasting effects

Precautionary statements:

If medical advice is needed, have product container or label at hand

Keep out of reach of children

Read label before use

Obtain special instructions before use

Avoid release to the environment

Do not handle until all safety precautions have been read and understood

Do not breathe dust/fume/gas/mist/vapours/spray

Wash skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Collect spillage

Rinse mouth

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing

IF exposed or concerned: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Store locked up

Store in a well ventilated place. Keep container tightly closed

Dispose of contents and container to an approved waste disposal plant

Other Non-GHS Classification:

WHMIS NFPA/HMIS



NFPA SCALE (0-4)

Health	3
Flammability	2
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:

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CAS 108-95-2	Phenol	>89 %
CAS 7732-18-5	Deionized Water	<11 %
CAS 6153-56-6	Oxalic acid, dihydrate	<0.01 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear. DO NOT use mouth-to-mouth resuscitation if victim ingested or inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

After skin contact: Immediately enter emergency shower rinsing while removing contaminated clothing and shoes. Transport victim to the hospital. Wash hands and exposed skin with soap and plenty of water. Discard contaminated clothing in a manner which limits further exposure. SPEEDY ACTION IS CRITICAL!. Destroy contaminated shoes.

After eye contact: Incompatible materials. Continue rinsing eyes during transport to the hospital. Protect unexposed eye. Remove contact lenses while rinsing. DO NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required for at least 30 minutes.

After swallowing: Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately seek medical attention. Notify a physician immediately and call Poison Control.

Most important symptoms and effects, both acute and delayed:

Irritation. Shortness of breath. Headache. Nausea. Dizziness. Central Nervous System impairment. Upper Respiratory Tract irritation. Lung damage. Eye irritation. Skin irritation.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. A vapor suppressing foam may be used to reduce vapors.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Avoid dust formation. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational. Use spark proof tools.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

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Methods and material for containment and cleaning up:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Absorb with suitable material and containerize for disposal. Remove all sources of ignition.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Store protected from moisture. Keep from contact with oxidizing materials. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials. Store protected from light. Keep container closed when not in use.

SECTION 8 : Exposure controls/personal protection



Control Parameters:

108-95-2, Phenol, TWA 5.000000 ppm USA. ACGIH
108-95-2, Phenol, TWA 5.000000 ppm 19.000000 mg/m3 USA. NIOSH
108-95-2, Phenol, TWA 5.000000 ppm 19.000000 mg/m3 USA. OSHA
108-95-2, Phenol, 250mg/g Creatinine Urine ACGIH (BEI)
6153-56-6, Oxalic acid dihydrate, TWA 1 mg/m3 USA. ACGIH
6153-56-6, Oxalic acid dihydrate, TWA 1.000000 mg/m3 USA. OSHA
6153-56-6, Oxalic acid dihydrate, TWA 1.000000 mg/m3 USA. NIOSH

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

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Eye protection:

Tightly fitting safety goggles and faceshield (8 - inch minimum) are appropriate eye protection. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before reworking wash contaminated clothing. Discard contaminated shoes.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Clear colorless liquid	Explosion limit lower: Explosion limit upper:	1.7 %(V) 8.6 %(V)
Odor:	disinfectant odor	Vapor pressure:	3.2
Odor threshold:	Not Determined	Vapor density:	3.2
pH-value:	6.0	Relative density:	1.07 g/cm3
Melting/Freezing point:	42.8 °C	Solubilities:	Soluble in water
Boiling point/Boiling range:	182.0 °C	Partition coefficient (n-octanol/water):	log Pow : 1.46
Flash point (closed cup):	79.4 °C	Auto/Self-ignition temperature:	715.0 °C
Evaporation rate:	Not Determined	Decomposition temperature:	Not Determined
Flammability (solid,gaseous):	Flammable	Viscosity:	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density: Not Determined			

SECTION 10 : Stability and reactivity

Reactivity: Nonreactive under normal conditions.

Chemical stability: Stable under normal conditions.

Possible hazardous reactions: None under normal processing.

Conditions to avoid: Incompatible materials. Light, ignition sources, excess heat, exposure to moist air or water.

Incompatible materials: Strong oxidizing agents, isocyanates, acetaldehyde, calcium hypochlorite, peroxomonosulfuric acid, nitrobenzene, sodium nitrite, aluminum chloride, peroxydisulfuric acid, 1,3 - butadiene, boron trifluoride diethyl ether.

Hazardous decomposition products: Carbon oxides.

SECTION 11 : Toxicological information

Acute Toxicity:

Oral:	108-95-2	LD50 Oral - Rat - 317.0 mg/kg (Behavioral: Convulsions or effect on seizure threshold)
Inhalation:	108-95-2	LC50 Inhalation - Rat - 8 h - 900 mg/m3

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Oral:	108-95-2	LD50 Dermal - Rabbit - 630.0 mg/kg
Oral:	6153-56-6	LD50 Oral - Rat - 1,080 mg/kg
Chronic Toxicity: No additional information.		
Corrosion Irritation:		
Dermal:	108-95-2	Skin - Rabbit Result : Severe skin irritation - 24 h
Ocular:	108-95-2	Eyes - Rabbit Result : Corrosive to eyes
Dermal:	6153-56-6	Skin - Rabbit Result : Mild skin irritation
Ocular:	6153-56-6	Eyes - Rabbit Result : Risk of serious damage to eyes.
Sensitization:		No additional information.
Single Target Organ (STOT):		108-95-2: May cause damage to organs through prolonged or repeated exposure
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.
Mutagenicity:		No additional information.
Reproductive Toxicity:		6153-56-6: Possible risk of congenital malformation in the fetus.

SECTION 12 : Ecological information

Ecotoxicity

108-95-2: LC50 - Leuciscus idus (Golden orfe) - 14.00 - 25.00 mg/l - 48 h

108-95-2: LC50 - Carassius auratus (goldfish) - 36.10 - 68.80 mg/l - 96 h

108-95-2: EC50 - Daphnia magna (Water flea) - 56 mg/l - 48 h

108-95-2: EC50 - Chlorella vulgaris (Fresh water algae) - 370.00 mg/l - 96 h

6153-56-6: LC50 - Leuciscus idus (Golden orfe) - 160 mg/l - 48 h

6153-56-6: EC50 - Daphnia magna (Water flea) - 137 mg/l - 48 h

Persistence and degradability: 108-95-2: Result : - Readily biodegradable. Phenol, Liquified: Half - life: day 15 hours, night 12 minutes

Bioaccumulative potential:

Mobility in soil: Mobile in soil and water.

Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must

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also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

UN2821

UN proper shipping name

Phenol Solutions

Transport hazard class(es)



Class:

6.1 Toxic substances

Packing group:II

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic, Fire

SARA Section 313 (Specific toxic chemical listings):

108-95-2 Phenol

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

108-95-2 Phenol 1000 lb

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

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None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

108-95-2 Phenol

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: . The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

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