



Revision Date 08-Jan-2016

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

| Product Identifier | |
|-------------------------------------|-------------------------------------|
| Product Name | Phenol, Saturated Solution |
| | |
| Other means of identification | |
| Product Code(s) | 0945 |
| UN/ID no. | 2821 |
| Synonyms | No information available |
| | |
| Recommended use of the chemic | cal and restrictions on use |
| Recommended Use | For Further Manufacturing Use Only. |
| Uses advised against | Not for Human or Animal Drug Use |
| - | · · |
| Details of the supplier of the safe | ty data sheet |
| Company Address | Manufacturer Address |
| VWR International, LLC | VWR International, LLC |
| Radnor Corporate Center | 28600 Fountain Parkway |
| 100 Matsonford Road | Solon, Ohio 44139 |
| Radnor, PA 19087-8660 | , |
| Company Phone Number | 1-800-448-4442 |
| E-mail Address | info@amresco-inc.com |
| | |
| Emergency Telephone Number | |

Emergency Telephone Number Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Acute Toxicity - Oral | Category 3 |
|--|---------------------------|
| Acute Toxicity - Dermal | Category 3 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 3 |
| Skin Corrosion/Irritation | Category 1 Sub-category B |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Germ cell mutagenicity | Category 2 |
| Specific target organ toxicity (repeated exposure) | Category 2 |

Label elements

Emergency Overview

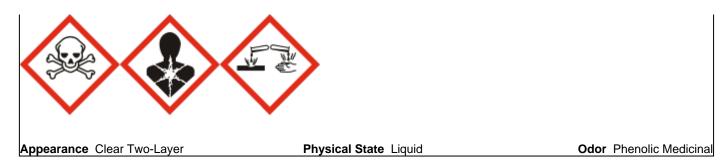
Danger

Hazard statements

- 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



Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Specific treatment (see .? on this label) Immediately call a POISON CENTER or doctor Specific treatment (see .? on this label) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor Call a POISON CENTER or doctor if you feel unwell IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower Wash contaminated clothing before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing Immediately call a POISON CENTER or doctor IF SWALLOWED: Immediately call a POISON CENTER or doctor Rinse mouth Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not regulated

Other Information

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | EC No. | Weight % | Trade Secret |
|---------------|----------|-----------|----------|----------------|
| Phenol | 108-95-2 | 203-632-7 | 60-70 | Not applicable |

4. FIRST AID MEASURES

First Aid Measures

Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

| Skin Contact | Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. | | |
|--|---|--|--|
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. | | |
| Ingestion | Never give anything by mouth to an unconscious person. Rinse mouth. | | |
| Most important symptoms and effects, both acute and delayed | | | |
| Most Important Symptoms/Effects | No information available. | | |
| Indication of any immediate medical attention and special treatment needed | | | |
| Notes to Physician | Treat symptomatically. | | |

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Explosion Data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| Personal protection | Ensure adequate ventilation, especially in confined areas. | | |
|--|---|--|--|
| Environmental Precautions | | | |
| Environmental Precautions | See Section 12 for additional Ecological information. | | |
| Methods and material for containment and cleaning up | | | |
| Methods for Containment | Prevent further leakage or spillage if safe to do so. | | |
| Methods for Cleaning Up | Cover with dry lime or soda ash. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete. | | |

7. HANDLING AND STORAGE

Precautions for Safe Handling Handle in accordance with good industrial hygiene and safety practice. Light Sensitive. Conditions for safe storage, including any incompatibilities Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from light. Incompatible Products Storage oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|------------|---------------------------|-------------------------------|
| Phenol | TWA: 5 ppm | TWA: 5 ppm | IDLH: 250 ppm |
| 108-95-2 | | TWA: 19 mg/m ³ | Ceiling: 15.6 ppm |
| | | | Ceiling: 60 mg/m ³ |
| | | | TWA: 5 ppm |
| | | | TWA: 19 mg/m ³ |

Appropriate engineering controls

| Engineering Measures | Showers |
|----------------------|----------------------|
| | Eyewash stations |
| | Ventilation systems. |

Individual protection measures, such as personal protective equipment

| Eye/Face Protection | Avoid contact with eyes. Safety glasses with side-shields. | | |
|--------------------------|---|--|--|
| Skin and Body Protection | Wear protective gloves/clothing. | | |
| Respiratory Protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. | | |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical State | Liquid | | Dhanalia Madiairad |
|------------------------------|--------------------------|------------------|--------------------------|
| Appearance | Clear Two-Layer | Odor | Phenolic Medicinal |
| Color | No information available | Odor Threshold | No information available |
| Property | Values | Remarks • Method | |
| H | No information available | | |
| Melting point/freezing point | | | |
| Boiling Point/Range | No information available | | |
| Flash Point (High in °C) | No information available | | |
| Evaporation Rate | No information available | | |
| Flammability (solid, gas) | No information available | | |
| Flammability Limit in Air | | | |
| Upper flammability limit: | No information available | | |
| Lower flammability limit: | No information available | | |
| Vapor pressure | No information available | | |
| Vapor Density | No information available | | |
| Specific Gravity | No information available | | |
| Water Solubility | No information available | | |
| Solubility in other solvents | No information available | | |
| Partition coefficient | No information available | | |
| Autoignition Temperature | No information available | | |
| Decomposition Temperature | No information available | | |
| Kinematic viscosity | No information available | | |
| Dynamic viscosity | No information available | | |
| Explosive Properties | No information available | | |
| Oxidizing Properties | No information available | | |
| | | | |
| Other Information | | | |

Softening Point Molecular Weight VOC Content Density Bulk Density No information available No information available No information available No information available No information available

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical Stability

Stable under recommended storage conditions. Possibility of Hazardous Reactions None under normal processing. Conditions to Avoid Protect from light. Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases. Hazardous Decomposition Products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| Inhalation | Toxic by inhalation. |
|--------------|---|
| Eye Contact | Corrosive to the eyes and may cause severe damage including blindness. |
| Skin Contact | Contact causes severe skin irritation and possible burns. Toxic in contact with skin. |
| Ingestion | Toxic if swallowed. |

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|---------------------------------|----------------------|-----------------------------------|
| Phenol | = 317 mg/kg (Rat) = 340 mg/kg (| = 630 mg/kg (Rabbit) | = 316 mg/m ³ (Rat) 4 h |
| 108-95-2 | Rat) | | |

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin Corrosion/Irritation Serious Eye Damage/Eye Corrosivity Sensitization Mutagenic Effects Carcinogenicity | e Irritation Risk of seric This product No informati No informati | Causes severe burns. Risk of serious damage to eyes. This product is corrosive to living tissue. No information available. No information available. The table below indicates whether each agency has listed any ingredient as a carcinogen. | | | |
|---|--|--|---|---|--|
| Chemical Name | ACGIH | | | | |
| Phenol | - | Group 3 | - | - | |
| 108-95-2 | | | | | |
| Reproductive Toxicity | No informati | on available. | | | |
| STOT - single exposure | No informati | No information available. | | | |
| STOT - repeated exposu | re No informati | No information available. | | | |
| Chronic Toxicity | Suspected r | Suspected mutagen. | | | |
| Target Organ Effects | Kidneys, Liv | Kidneys, Liver, Central nervous system (CNS). | | | |
| Aspiration hazard | . . | No information available. | | | |

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

10% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Algae/aquatic plants | Toxicity to Fish | Crustacea |
|---------------------------------|--|--|
| 187 - 279: 72 h Desmodesmus | 20.5 - 25.6: 96 h Pimephales | 4.24 - 10.7: 48 h Daphnia magna |
| subspicatus mg/L EC50 static | promelas mg/L LC50 static 5.449 - | mg/L EC50 Static 10.2 - 15.5: 48 h |
| 46.42: 96 h Pseudokirchneriella | 6.789: 96 h Oncorhynchus mykiss | Daphnia magna mg/L EC50 |
| subcapitata mg/L EC50 0.0188 - | | |
| | | |
| subcapitata mg/L EC50 static | 0 | |
| | | |
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| | , , , | |
| | 187 - 279: 72 h Desmodesmus subspicatus mg/L EC50 static 46.42: 96 h Pseudokirchneriella | 187 - 279: 72 h Desmodesmus subspicatus mg/L EC50 static 46.42: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.0188 - 0.1044: 96 h Pseudokirchneriella20.5 - 25.6: 96 h Pimephales promelas mg/L LC50 static 5.449 - 6.789: 96 h Oncorhynchus mykiss |

Persistence and Degradability No information available.

Bioaccumulation/Accumulation

No information available.

| Chemical Name | Partition coefficient |
|---------------|-----------------------|
| Phenol | 1.47 |
| 108-95-2 | |

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

| Chemical Name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|--------------------|---|------------------------|------------------------|------------------------|
| Phenol 108-95-2 | - | - | - | - |

| Chemical Name | California Hazardous Waste Status |
|---------------|-----------------------------------|
| Phenol | Toxic; Corrosive |

108-95-2

14. TRANSPORT INFORMATION

| DOT | |
|----------------------|-----------------|
| UN/ID no. | 2821 |
| Proper shipping name | PHENOL SOLUTION |
| Hazard Class | 6.1 |
| Packing Group | II |
| IATA | |
| UN/ID no. | 2821 |
| Proper shipping name | PHENOL SOLUTION |
| Hazard Class | 6.1 |
| Packing Group | II |

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|-----------------|
| TSCA | Does not comply |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Does not Comply |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

COMPLIES

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Component | SARA 313 - Threshold Values % |
|--------------------|-------------------------------|
| Phenol | 1.0 |
| 108-95-2 (60-70) | |

SARA 311/312 Hazard Categories

| Acute Health Hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Hazard | Yes |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|--------------------------------|------------------------|---------------------------|-------------------------------|
|---------------|--------------------------------|------------------------|---------------------------|-------------------------------|

| Phenol 108-95-2 | 1000 lb | Х | Х | Х |
|--------------------|---------|---|---|---|
|--------------------|---------|---|---|---|

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|--------------------|--------------------------|---------------------------------------|---|
| Phenol 108-95-2 | 1000 lb | 1000 lb | RQ 1000 lb final RQ RQ 454 kg final RQ |

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

| Chemical Name | California Prop. 65 |
|-------------------|---------------------|
| Phenol - 108-95-2 | - |
| | • |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Phenol | Х | Х | Х |
| 108-95-2 | | | |

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

| Issuing Date | |
|--------------------------|--|
| Revision Date | |
| Revision Note | |
| No information available | |
| Disclaimer | |

04-Jun-2010 08-Jan-2016

Disclaimer

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet