RICCA CHEMICAL COMPANY®

# Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

## SECTION 1: Identification

### 1.1. Product Identifier

**Trade Name or Designation** Phenol Standard, 1% (w/v)

**Product Number** R5737000

**Other Identifying Product Numbers** R5737000-1C

### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

### 1.3. Details of the Supplier of the Safety Data Sheet

**Company** Ricca Chemical Company

**Address** 412 West Fork Drive

Arlington, TX 76012 USA

**Telephone** 888-467-4222

### 1.4. Emergency Telephone Number (24 hours)

| | |
|---|---|
| CHEMTREC (USA) | 800-424-9300 |
| CHEMTREC (International) | 1+ 703-527-3887 |

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## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture

| Hazard Class | Category | Hazard Statements | Precautionary Statements |
|---|---|---|---|
| Acute Toxicity - Inhalation (Vapors) | Category 3 | H331 | P261,P271,P304+P340,P311, P321,P403+P233,P405,P501 |
| Skin Corrosion / Irritation | Category 2 | H315 | P264,P280,P302+P352,P321, P332+P313,P362+P364 |
| Serious Eye Damage / Eye Irritation | Category 2 | H319 | P264,P280,P305+P351+P338, P337+P313 |
| Specific Target Organ Toxicity - Single Exposure | Category 1 | H370 | P260,P264,P270,P308+P311, P321,P405,P501 |
| Specific Target Organ Toxicity - Repeated Exposure | Category 2 | H373 | P260,P314,P501 |

### 2.2. GHS Label Elements

**Pictograms:**



**Signal Word:** **Danger**

**Hazard Statements:**

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

| Hazard Number | Hazard Statement |
|---|---|
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H331 | Toxic if inhaled |
| H370 | Causes damage to eyes, kidneys, liver |
| H373 | May cause damage to central nervous system through prolonged or repeated exposure |

**Precautionary Statements:**

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

**Prevention**

| Precautionary Number | Precautionary Statement |
|---|---|
| P260 | Do not breathe fumes or mist. |
| P264 | Wash hands, arms, and face thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves and eye protection. |

**Response**

| Precautionary Number | Precautionary Statement |
|---|---|
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P311 | If exposed or concerned: Call a poison center or doctor. |
| P314 | Get medical advice or attention if you feel unwell. |
| P332+P313 | If skin irritation occurs: Get medical advice or attention. |
| P337+P313 | If eye irritation persists: Get medical advice or attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |

**Storage**

| Precautionary Number | Precautionary Statement |
|---|---|
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |

**Disposal**

| Precautionary Number | Precautionary Statement |
|---|---|
| P501 | Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations. |

## 2.3. Hazards not Otherwise Classified

No other hazards identified.

## 2.4. Ingredients of Unknown Acute Toxicity

This product does not contain any ingredients of unknown acute toxicity.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Mixture

| Chemical Name (IUPAC) | Common Name and Synonyms | CAS Number | Weight% |
|---|---|---|---|
| water | Water | 7732-18-5 | 98.99 |
| hydroxybenzene | Phenol; carbolic acid | 108-95-2 | 1.01 |

## SECTION 4: First-Aid Measures

### 4.1. Description of Necessary Measures

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Effects expected to be less severe than exposure to higher concentrations of phenol where symptoms may include eye burns with redness, pain, blurred vision, and possible damage and blindness.

**Ingestion:** Unless otherwise advised, give 15 - 30 mL of vegetable oil and induce vomiting. Call a physician.

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Skin Contact:** IF ON SKIN: Wash with plenty of water. May cause irritation. Absorbs through skin, may cause white, wrinkled discoloration, burns and/or systemic poisoning.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic if inhaled Not as toxic as higher concentrations. May irritate eyes and skin upon contact. May be harmful if swallowed or absorbed through skin. Wash areas of contact with plenty of water. EYE CONTACT: Effects expected to be less severe than exposure to higher concentrations of phenol where symptoms may include eye burns with redness, pain, blurred vision, and possible damage and blindness. SKIN CONTACT: May cause irritation. Absorbs through skin, may cause white, wrinkled discoloration, burns and/or systemic poisoning.

### 4.3. Immediate Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Unless otherwise advised, give 15 - 30 mL of vegetable oil and induce vomiting. Call a physician.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

### 5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Not considered to be a fire or explosion hazard.

### 5.3. Special Protective Equipment and Precautions for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

### 6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

Store in a well-ventilated place. Keep container tightly closed. Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

## SECTION 8: Exposure Controls / Personal Protection

### 8.1. Exposure Limits

**U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)**

| Chemical Name | CAS Number | Exposure Limit |
|---|---|---|
| Phenol | 108-95-2 | 5 ppm TWA; 19 mg/m3 TWA |

**U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits**

No limits found.

**U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)**

No limits found.

**U.S. OSHA - Specifically Regulated Chemicals**

No limits found.

**ACGIH - Threshold Limit Values - Ceilings (TLV-C)**

No limits found.

**ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)**

No limits found.

**ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)**

| Chemical Name | CAS Number | Exposure Limit |
|---|---|---|
| Phenol | 108-95-2 | 5 ppm TWA |

## 8.2. Engineering Controls

Use only outdoors or in a well-ventilated area. No specific controls are needed. Normal room ventilation is adequate.

## 8.3. Individual Protective Measures and Personal Protective Equipment

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles.

# Safety Data Sheet

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## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

| | |
|---|---|
| **Physical State:** | liquid |
| **Color:** | Colorless |
| **Odor:** | distinctive, strong acidic |
| **Odor Threshold:** | 0.1-1 ppm |
| **Melting/Freezing Point:** | Approximately 0°C |
| **Boiling Point/Range:** | Approximately 100°C |
| **Flammability:** | Data not available. |
| **Flammability/Explosive Limits:** | 1.36% (Phenol) - 10% (Phenol) |
| **Flash Point:** | Not flammable |
| **Auto-Ignition Temperature:** | 715°C (Phenol) |
| **Decomposition Temperature:** | Data not available. |
| **pH:** | approximately 6 |
| **Kinematic Viscosity:** | Data not available. |
| **Solubility:** | miscible |
| **Vapor Pressure:** | 0.047 kPa (Phenol) |
| **Evaporation Rate:** | Data not available. |
| **Relative Density:** | 1.0 |
| **Relative Vapor Density:** | 3.2 (Phenol, air = 1) |
| **Particle Characteristics:** | Data not available. |
| **Partition Coefficient n-octanol/water, log** | Data not available. |

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

### 10.2. Possibility of Hazardous Reactions

Data not available.

### 10.3. Conditions to Avoid and Incompatible Materials

Strong oxidizers, calcium hypochlorite.

### 10.4. Hazardous Decomposition Products

Will not occur.

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

**Acute Toxicity - Oral Exposure:**

Not acutely toxic.

| Chemical Name | CAS Number | Toxicity |
|---|---|---|
| Phenol | 108-95-2 | Oral LD50 Acute Toxicity Estimate 100 mg/kg (Source: ECHA) |

**Acute Toxicity - Dermal Exposure:**

Not acutely toxic.

| Chemical Name | CAS Number | Toxicity |
|---|---|---|
| Phenol | 108-95-2 | Dermal LD50 Rabbit 630 mg/kg (Source: NLM_CIP) |

**Acute Toxicity - Inhalation Exposure:**

Inhalation acute toxicity estimate (ATE, vapor): 4.9505 mg/L, 4 h(calculated)

| Chemical Name | CAS Number | Toxicity |
|---|---|---|
| Phenol | 108-95-2 | Inhalation LC50 Acute Toxicity Estimate 0.05 mg/L 4h (Source: Canada_WHMIS) |

### 11.2 Carcinogenicity:

**International Agency for Research on Cancer (IARC)**

| Chemical Name | CAS Number | Classification |
|---|---|---|
| Phenol | 108-95-2 | Group 3 (Not Classified) - Monograph 71 [1999]; Monograph 47 [1989] |

**National Toxicology Program (NTP)**

| Chemical Name | CAS Number | Classification |
|---|---|---|
| Phenol | 108-95-2 | Male Rat - No Evidence; Female Rat - No Evidence; Male Mice - No Evidence; Female Mice - No Evidence (TR-203) |

**U.S. OSHA specifically regulated carcinogens**

| Chemical Name | CAS Number | Classification |
|---|---|---|
| | No data found. | |

### 11.3 Additional Toxicology Information:

Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. Causes damage to eyes, kidneys, liver. May cause damage to central nervous system through prolonged or repeated exposure.

## SECTION 12: Ecological Information

### 12.1. Ecotoxicity

| Chemical Name | CAS Number | Species | Exposure | Toxicity |
|---|---|---|---|---|
| Phenol | 108-95-2 | Earthworm | Acute | LC100 56 Days Eisenia foetida 6900 mg/kg [soil dry weight] (IUCLID) |
| Phenol | 108-95-2 | Freshwater Algae | Acute | EC50 96 h Pseudokirchneriella subcapitata 46.42 mg/L (EPA); EC50 96 h Pseudokirchneriella subcapitata 0.0188 - 0.1044 mg/L [static] (EPA); EC50 72 h Desmodesmus subspicatus 187 - 279 mg/L [static] (EPA) |
| Phenol | 108-95-2 | Freshwater Fish | Acute | LC50 96 h Pimephales promelas 11.9 - 50.5 mg/L [flow-through] (EPA); LC50 96 h Pimephales promelas 20.5 - 25.6 mg/L [static] (EPA); LC50 96 h Pimephales promelas 32 mg/L (IUCLID); LC50 96 h Oncorhynchus mykiss 5.449 - 6.789 mg/L [flow-through] (EPA); LC50 96 h Oncorhynchus mykiss 7.5 - 14 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 4.23 - 7.49 mg/L [semi-static] (EPA); LC50 96 h Oncorhynchus mykiss 5.0 - 12.0 mg/L (IUCLID); LC50 96 h Lepomis macrochirus 13.5 mg/L [static] (EPA); LC50 96 h Lepomis macrochirus 11.9 - 25.3 mg/L [flow-through] (EPA); LC50 96 h Lepomis macrochirus 11.5 mg/L [semi-static] (EPA); LC50 96 h Poecilia reticulata 34.09 - 47.64 mg/L [static] (EPA); LC50 96 h Poecilia reticulata 31 mg/L [semi-static] (EPA); LC50 96 h Brachydanio rerio 27.8 mg/L (IUCLID); LC50 96 h Cyprinus carpio 0.00175 mg/L [semi-static] (EPA); LC50 96 h Oryzias latipes 33.9 - 43.3 mg/L [flow-through] (EPA); LC50 96 h Oryzias latipes 23.4 - 36.6 mg/L [static] (EPA) |
| Phenol | 108-95-2 | Water Flea | Acute | EC50 48 h Daphnia magna 4.24 - 10.7 mg/L [Static] (EPA); EC50 48 h Daphnia magna 10.2 - 15.5 mg/L (EPA) |

### 12.2. Persistence and Degradability

Data not available.

### 12.3. Bioaccumulative Potential

Data not available.

### 12.4. Mobility in soil

Data not available.

### 12.5. Other Adverse Ecological Effects

Data not available.

## SECTION 13: Disposal Considerations

### 13.1. Waste Treatment Methods

Data not available.

## SECTION 14: Transportation Information

### 14.1 Transportation by Land - Department of Transportation (DOT, United States of America)

Not regulated according to DOT regulations.

### 14.2 Transportation by Air - International Air Transport Association (IATA)

Not regulated according to IATA Dangerous Goods Regulations.

### 14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG regulations.

## SECTION 15: Regulatory Information

# Safety Data Sheet

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### 15.01. Occupational Safety and Health Administration (OSHA) Hazards

| Chemical Name | CAS Number | Regulatory Information |
|---|---|---|
| | | No data found. |

### 15.02. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

| Chemical Name | CAS Number | RQ | TPQ |
|---|---|---|---|
| Phenol | 108-95-2 | 500 lb lower TPQ; 10000 lb upper TPQ | 1000 lb EPCRA RQ |

### 15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

| Chemical Name | CAS Number | Regulatory Information |
|---|---|---|
| Phenol | 108-95-2 | 1000 lb final RQ; 454 kg final RQ |

### 15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

| Chemical Name | CAS Number | List | Regulatory Information |
|---|---|---|---|
| Phenol | 108-95-2 | Emission Reporting | 1.0 % de minimis concentration |

### 15.05. Massachusetts Right-to-Know Substance List

| Chemical Name | CAS Number | Regulatory Information |
|---|---|---|
| Phenol | 108-95-2 | Extraordinarily hazardous |

### 15.06. Pennsylvania Right-to-Know Hazardous Substances

| Chemical Name | CAS Number | Regulatory Information |
|---|---|---|
| Phenol | 108-95-2 | Environmental hazard |

### 15.07. New Jersey Worker and Community Right-to-Know Components

| Chemical Name | CAS Number | Regulatory Information |
|---|---|---|
| Phenol | 108-95-2 | sn 1487 |

### 15.08. California Proposition 65

| Chemical Name | CAS Number | Regulatory Information |
|---|---|---|
| | | No data found. |

### 15.09. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

| Chemical Name | CAS Number | List | Status |
|---|---|---|---|
| Phenol | 108-95-2 | DSL | Present |
| Water | 7732-18-5 | DSL | Present |

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

| Chemical Name | CAS Number | Status |
|---|---|---|
| Phenol | 108-95-2 | Present (ACTIVE) |
| Water | 7732-18-5 | Present [XU] (ACTIVE) |

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

| Chemical Name | CAS Number | List | Number |
|---|---|---|---|
| Phenol | 108-95-2 | EINECS | 203-632-7 |
| Water | 7732-18-5 | EINECS | 231-791-2 |

### 15.12. China - Inventory of Existing chemical Substances (IECSC)

| Chemical Name | CAS Number | Status |
|---|---|---|
| Phenol | 108-95-2 | Present [02171] |
| Water | 7732-18-5 | Present [32224] |

### 15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

| Chemical Name | CAS Number | List | Status |
|---|---|---|---|
| Phenol | 108-95-2 | Annex 1 | Present [KE-28209] |
| Water | 7732-18-5 | Annex 1 | Present [KE-35400] |

### 15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

| Chemical Name | CAS Number | MITI No. |
|---|---|---|
| Phenol | 108-95-2 | (3)-481 |
| Water | 7732-18-5 | - (listed on Japanese Pharmacopoeia 8th Edition) |

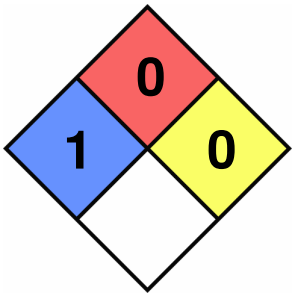
## SECTION 16: Other Information

# Safety Data Sheet

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## 16.1 National Fire Protection Associate (NFPA) Rating

| | |
|---|---|
| **Health:** | 1 |
| **Flammability:** | 0 |
| **Reactivity** | 0 |
| **Special Hazard:** | |




## 16.2 Document Revision

**Last Revision Date:**
2026-05-07

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.