



Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Phenol, ACS Reagent Grade, Crystal

Product Number: R5780000

Other Identifying Product Numbers: R5780000-100D2

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: 448 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

Safety Data Sheet

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

Hazard Class	Category	Hazard Statements:	Precautionary Statements:
Acute Toxicity - Oral	Category 4	H302	P264, P270, P301+P312, P330, P501
Acute Toxicity - Dermal	Category 3	H311	P280, P302+P352, P312, P321, P361, P405, P501
Acute Toxicity - Inhalation	Category 1	H330	P260, P271, P285, P304+P340, P310, P320, P403+P233, P405, P501
Skin Corrosion / Irritation	Category 1	H314	P260, P264, P280, P301+P330+P331, P303+P361+P353, P363, P304+P340, P310, P321, P305+P351+P338, P405, P501
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310
Specific Target Organs/Systemic Toxicity Following Single Exposure	Category 1	H370	P260, P264, P270, P307+P311, P321, P405, P501
Specific Target Organs/Systemic Toxicity Following Repeated Exposure	Category 2	H373	P260, P314, P501

2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

Hazard Number	Hazard Statement
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet

Precautionary Statements:

Precautionary Number	Precautionary Statement
P260	Do not breathe dust/fumes.
P264	Wash arms, hands 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.
P285	In case of inadequate ventilation wear respiratory protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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.
P307+P311	IF exposed: Call a POISON CENTER or physician.
P310	Immediately call a POISON CENTER or physician.
P312	Call a POISON CENTER or physician if you feel unwell.
P314	Get medical attention if you feel unwell.
P320	Specific treatment is urgent (Wash areas of contact with water immediately).
P321	Specific treatment (Wash areas of contact with water immediately).
P330	Rinse mouth.
P361	Take off immediately all contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Phenol	C ₆ H ₅ OH	94.11 g/mol	108-95-2	100.00

Safety Data Sheet

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Corrosive! Causes irritation and burns. Can cause burns that may lead to permanent impairment of vision, including blindness.

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

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Corrosive. Rapidly absorbed through skin causing systemic poisoning. May cause white, wrinkled discoloration and burns, which may be painless due to local anesthetic effect.

Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Unless otherwise advised, give 15 - 30 mL of vegetable oil and induce vomiting. Call a physician.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. Causes serious eye damage. Fatal if inhaled. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure. DANGER! Toxic. May be fatal if swallowed, inhaled, or absorbed through skin. Rapidly absorbed through skin. Corrosive. Causes severe burns to all areas of contact. Combustible liquid and vapor. EYE CONTACT: Corrosive! Causes irritation and burns. Can cause burns that may lead to permanent impairment of vision, including blindness. SKIN CONTACT: Corrosive. Rapidly absorbed through skin causing systemic poisoning. May cause white, wrinkled discoloration and burns, which may be painless due to local anesthetic effect.

4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment is urgent (Wash areas of contact with water immediately). Specific treatment (Wash areas of contact with water immediately).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Water, dry chemical, foam, or carbon dioxide. Water spray may be used to keep fire-exposed containers cool.

5.2. Specific Hazards Arising from the Substance or Mixture

Combustible solid.

5.3. Special Protective Equipment for Firefighters

Wear special protective clothing and positive pressure self-contained breathing apparatus. Viton or Saranex barrier recommended.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

Safety Data Sheet

6.2. Cleanup and Containment Methods and Materials

Control runoff and isolate discharged material for proper disposal. Approach release from upwind.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Store in a tightly closed container in a cool, dry, well ventilated area, out of direct sunlight and away from heat, ignition sources, and incompatible materials. Containers may be hazardous when empty since they retain product residues.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Phenol (108-95-2)	TWA	USA	5 ppm TWA; 19 mg/m ³ TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Phenol (108-95-2)	TLV-TWA	USA	5 ppm TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Phenol (108-95-2)	TWA	USA	"5 ppm TWA; 19 mg/m ³ TWA" As Phenol [108-95-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Phenol (108-95-2)	TLV-TWA	USA	"5 ppm TWA" As Phenol [108-95-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Phenol (108-95-2)	TWA	USA	"5 ppm TWA; 19 mg/m ³ TWA" As Phenol [108-95-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Phenol (108-95-2)	TLV-TWA	USA	"5 ppm TWA" As Phenol [108-95-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Phenol (108-95-2)	TLV-TWA	USA	"5 ppm TWA" As Phenol [108-95-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Phenol (108-95-2)	TWA	USA	"5 ppm TWA; 19 mg/m ³ TWA" As Phenol [108-95-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Phenol (108-95-2)	TLV-TWA	USA	"5 ppm TWA" As Phenol [108-95-2]	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Phenol (108-95-2)	TWA	USA	"5 ppm TWA; 19 mg/m ³ TWA" As Phenol [108-95-2]	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)

8.2. Exposure Controls

Engineering Controls: Use only outdoors or in a well-ventilated area. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

Safety Data Sheet

Respiratory Protection: In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn.

Skin Protection: Wear protective gloves and eye protection. Chemical resistant gloves.

Eye Protection: Wear protective gloves and eye protection. Safety glasses or goggles.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection. Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn. Chemical resistant gloves. Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Colorless to pink solid

Physical State: Solid

Odor: Data not available.

Odor Threshold: 0.060 Ppm

pH: Data not available.

Melting/Freezing Point: 40.9°C

Initial Boiling Point/Range: 181.8°C - 181.8°C

Flash Point: 79°C

Evaporation Rate: Data not available.

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Vapor Pressure: 0.48 hPa at 20°C

Vapor Density: Data not available.

Relative Density: 1.07

Solubility: 8000 Mg/L at 25°C

Partition Coefficient: 1.47

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

Viscosity: Data not available.

Explosive Properties: Data not available.

Oxidizing Properties: Data not available.



Safety Data Sheet

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

Oxidizers, aluminum chloride and nitrobenzene, calcium hypochlorite, butadiene, halogens, formaldehyde, acids, isocyanates, sodium nitrite and many other materials.

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Dermal Exposure:

Toxic in contact with skin. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Specific treatment (Wash areas of contact with water immediately). Take off immediately all contaminated clothing and wash it before reuse. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Inhalation Exposure:

Fatal if inhaled. Do not breathe dust/fumes. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment is urgent (Wash areas of contact with water immediately). Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Other Information:

LD50, Oral, Rat: 317 mg/kg (Phenol), LD50, Inhalation, Rat: 316 mg/m³ (Phenol), details of toxic effects not reported other than lethal dose value. LD50, Dermal, Rat: 669 mg/kg (Phenol), behavioral, kidney, ureter, bladder, skin effects noted. Investigated as a tumorigen.

Safety Data Sheet

Skin Corrosion and Irritation:

Causes severe skin burns and eye damage. Do not breathe dust/fumes. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. 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 physician.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Causes damage to organs. Do not breathe dust/fumes. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure. Do not breathe dust/fumes. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Not applicable.

12.2. Persistence and Degradability

Data not available.

Safety Data Sheet

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)

Sizes: 100 g

UN Number: UN1671

Proper Shipping Name: Phenol, solid

Hazard Class: 6.1

Packing Group: II

Hazard Label(s):



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

Sizes: 100 g

UN Number: UN1671

Proper Shipping Name: Phenol, solid

Hazard Class: 6.1

Packing Group: II

Hazard Label(s):



Safety Data Sheet

14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 100 g

UN Number: UN1671

Proper Shipping Name: PHENOL, SOLID

Hazard Class: 6.1

Packing Group: II

Hazard Label(s):



SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

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

Phenol (CAS # 108-95-2): "1000 lb EPCRA RQ" As Phenol [108-95-2]

Phenol (CAS # 108-95-2): "500 lb lower TPQ; 10000 lb upper TPQ" As Phenol [108-95-2]

Phenol (CAS # 108-95-2): 1000 lb EPCRA RQ

Phenol (CAS # 108-95-2): 500 lb lower TPQ; 10000 lb upper TPQ

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

Phenol (CAS # 108-95-2): "1000 lb final RQ; 454 kg final RQ" As Phenol [108-95-2]

Phenol (CAS # 108-95-2): 1000 lb final RQ; 454 kg final RQ

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Phenol (CAS # 108-95-2): "1.0 % de minimis concentration" As Phenol [108-95-2]

Phenol (CAS # 108-95-2): 1.0 % de minimis concentration

15.5. Massachusetts Right-to-Know Substance List

Phenol (CAS # 108-95-2): "Extraordinarily hazardous" As Phenol [108-95-2]

Phenol (CAS # 108-95-2): Extraordinarily hazardous

15.6. Pennsylvania Right-to-Know Hazardous Substances

Phenol (CAS # 108-95-2): "Environmental hazard" As Phenol [108-95-2]

Phenol (CAS # 108-95-2): "Present" As Phenol [108-95-2]

Phenol (CAS # 108-95-2): Environmental hazard

Phenol (CAS # 108-95-2): Present

Safety Data Sheet

15.7. New Jersey Worker and Community Right-to-Know Components

Phenol (CAS # 108-95-2): "mutagen" As Phenol [108-95-2]
Phenol (CAS # 108-95-2): "SN 1487 500 lb TPQ" As Phenol [108-95-2]
Phenol (CAS # 108-95-2): "sn 1487" As Phenol [108-95-2]
Phenol (CAS # 108-95-2): mutagen
Phenol (CAS # 108-95-2): sn 1487
Phenol (CAS # 108-95-2): SN 1487 500 lb TPQ

15.8. California Proposition 65

Not listed.

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

Phenol (CAS # 108-95-2): "Present" As Phenol [108-95-2] (DSL)
Phenol (CAS # 108-95-2): Present (DSL)

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

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.

Phenol (CAS # 108-95-2): "Present (ACTIVE)" As Phenol [108-95-2]
Phenol (CAS # 108-95-2): Present (ACTIVE)

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

Phenol (CAS # 108-95-2): "203-632-7" As Phenol [108-95-2]
Phenol (CAS # 108-95-2): 203-632-7

Safety Data Sheet

SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. Fatal if inhaled. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure.

Do not breathe dust/fumes. Wash arms, hands and face 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 and eye protection. In case of inadequate ventilation wear respiratory protection.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment is urgent (Wash areas of contact with water immediately). Wash contaminated clothing before reuse.

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

Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

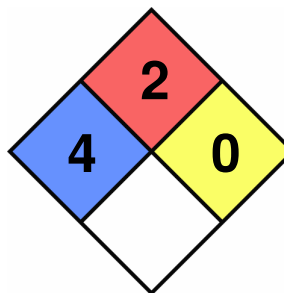
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 4
Flammability: 2
Reactivity: 0
Special Hazard:



16.4. Document Revision

Last Revision Date: 2025-01-30

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.