Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Phenolsulfonic Acid 65%
Commercial Name Not available.
Product Use Not available.
Restrictions On Use Not available.

Product Code 50-1385

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 Corrosive to Metals, Category 1, H290 Skin corrosion, Category 1B, H314 Serious eye damage, Category 1, H318 Germ cell mutagenicity, Category 2, H341 Specific target organ systemic toxicity - repeated exposure, Category 2, Nervous system, Kidney, Liver, Skin, H373

Signal Word DANGER

Hazard Statement(s) Causes severe skin burns and eye damage. Cuases serious eye damage. May be corrosive to metals.

Pictogram(s) or Symbol(s)

Precautionary Statement(s):

Prevention P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P234 Keep only in original container. P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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. P310 Immediately call a POISON CENTER/doctor. P321 Specific treatment (see supplemental first aid instructions on this label). P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage.

Storage P405 Store locked up. P406 Store in corrosive resistant stainless steel container with a resistant inner liner.

Disposal P501 Dispose of contents/ container to an approved waste disposal plant.

Section 3: Composition/Information on Ingredients

Substance/Mixture Mixture
Components Benzenesulfonic acid, hydroxy-, Sulfuric Acid and Phenol
% By Weight 65-67, < 3.5 and < 1
CAS# 98-67-9, 1333-39-7,
Molecular Weight Not available
Chemical Formula Not available.
Synonym(s) Not available.

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Benzenesulfonic acid, hydroxy-	1333-39-7	65-67	Not available	Not available
Sulfuric Acid	7664-93-9	< 3.5	Not available	Not available
Phenol	108-95-=2	< 1	Not available	Not available

Section 4: First-Aid Measures

Inhalation After inhalation: fresh air. Call in physician.

Skin Contact After contact with skin: rinse out with polyethylene glycol 400 or a mixture of polyethylene glycol 300/ethanol 2:1 and wash with plenty of water. If neither is available wash with plenty of water. Immediately take off contaminated clothing. Call a physician immediately.

Eye Contact After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

Ingestion After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation!). Call a physician immediately. Do not attempt to neutralize. Never give anything by mouth to an unconscious person.

Symptoms/Effects

Acute Irritation and corrosion, Cough, Shortness of breath Risk of blindness!

Delayed Irritation and corrosion, Cough, Shortness of breath Risk of blindness!

Immediate Medical Attention

Not available.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water, Foam, Carbon dioxide (CO2), Dry powder

Unsuitable Extinguishing Media

Not available

Products of Combustion

Mixture with combustible ingredients. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapors possible in the event of fire. Fire may cause evolution of: Sulfur oxides

Firefighters Special Equipment and Precautions

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Further information: Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures

Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Environmental precautions: Do not let product enter drains. Methods and materials for containment and cleaning up: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

Section 7: Handling and Storage

HANDLING: Observe label precautions. STORAGE: No metal containers. Tightly closed. Store below +30°C (+86°F).

Section 8: Exposure Controls/Personal Protection

Exposure Limits Phenol 108-95-2: ACGIH Time Weighted: 5 ppm Average (TWA): Skin designation: Can be absorbed through the skin. NIOSH/GUIDE Skin designation: Can be absorbed through the skin. Ceiling Limit Value and Time Period (if specified): 15.6 ppm 60 mg/m³ Ceiling Limit Value 15-min Recommended exposure limit (REL): 5 ppm 19 mg/m³ OSHA_TRANS Skin designation: Can be absorbed through the skin. PEL: 5 ppm 19 mg/m³ Z1A Time Weighted Average (TWA): 5 ppm 19 mg/m³ Skin designation (Final Rule Limit applies): Can be absorbed through the skin. sulphuric acid 7664-93-9 ACGIH Time Weighted Average (TWA): 0.2 mg/m³ Form of exposure: Thoracic fraction. NIOSH/GUIDE Recommended exposure limit (REL): 1 mg/m³ OSHA_TRANS PEL: 1 mg/m³ Z1A Time Weighted Average (TWA): 1 mg/m³

Engineering Controls Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Personal Protection

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier. Hygiene measures: Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance. Eye/face protection: Tightly fitting safety goggles Hand protection full contact: Glove material: Viton (R) Glove thickness: 0.70 mm Break through time: > 480 min splash contact: Glove material: Nitrile rubber Glove thickness: 0.40 mm Break through time: > 30 min The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 890 Vitoject® (full contact), KCL 730 Camatril® -Velours (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Other protective equipment: Acid-resistant protective clothing. Respiratory protection: required when vapors/aerosols are generated. Recommended Filter type: filter ABEK The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.

Section 9: Physical and Chemical Properties

Appearance	Liquid. reddish brown.
Odor	aromatic
Odor Threshold	Not available

Melting Point	ca. 32 °F (0 °C)	**pH**	1 at 50 g/l 68 °F (20 °C)
Freezing Point	Not available	**Vapor Pressure**	Not available
Boiling Point/Range	Not available	**Vapor Density**	Not available
Decomposition temperature	Not available	**Viscosity**	Not available
Partition Coefficient: n-octanol/water	Not available	**Evaporation Rate**	Not available
Flash Point	Not available	**Autoignition temperature**	Not available
Flammability	Not available	**Flammability or Explosive Limits:**	
		Lower	Not available
		Upper	Not available

Solubility(ies)	at 68 °F (20 °C) soluble
Other	Density 1.33 g/cm3 at 68 °F (20 °C) May be corrosive to metals

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	The product is chemically stable under standard ambient conditions (room temperature)
Hazardous Polymerization	Not available
Conditions to Avoid	Not available
Incompatible Materials	Metals
Hazardous Decomposition Products	Strong oxidizing agents

Section 11: Toxicological Information

RTECS Not available.

Acute Toxicity
Acute oral toxicity LD50 Rat: 4,200 mg/kg (External MSDS) Acute dermal toxicity Acute toxicity estimate : > 2,000 mg/kg

Skin Corrosion/Irritation
Severe irritant.

Serious Eye Damage/Irritation
Mixture causes serious eye damage. Risk of blindness!

Respiratory or Skin Sensitization
Not available.

Germ Cell Mutagenicity
Not available.

Carcinogenicity
Suspected human carcinogen

Reproductive Toxicity
Not available.

Routes of Entry
Eye contact, Skin contact

Symptoms Related to Exposure
If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.mucosal irritations, Cough, Shortness of breath, Possible damages: damage of respiratory tract

Potential Health Effects
Not available.

Target Organ(s) Cardio-vascular system Central nervous system Eyes. Skin. Liver. kidney. Lungs. Heart. Bladder. Gastro-intestinal

Section 12: Ecological Information

Ecotoxicity
Toxicity to fish LC0 Leuciscus idus (Golden orfe): 200 mg/l; 48 h (External MSDS) Toxicity to bacteria EC0 Pseudomonas fluorescens: 5,000 mg/l(External MSDS)

Persistance and Degradability
Biodegradability > 70 % OECD Test Guideline 301D Readily biodegradable.

Bioaccumulative Potential
Not available.

Mobility in Soil
Not available.

Other Adverse Effects
Not available.

Section 13: Disposal Considerations

Waste Disposal
The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Disposal of Container
Not available.

Other Considerations
Not available.

Section 14: Transport Information

DOT Classification
Land transport (DOT) UN number UN 1803 Proper shipping name PHENOLSULPHONIC ACID, LIQUID Class 8 Packing group II Environmentally hazardous --

Section 15: Regulatory Information

Regulations
SARA 313 The following components are subject to reporting levels established by SARA Title III, Section 313: Components Phenol 108-95-2 1.9999 % sulphuric acid 7664-93-9 1.9999 % SARA 302 The following components are subject to reporting levels established by SARA Title III, Section 302: Components Phenol 108-95-2 sulphuric acid 7664-93-9 Clean Water Act The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A: Components Phenol sulphuric acid The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3: Components Phenol sulphuric acid DEA List I Not listed DEA List II Listed Components sulphuric acid 7664-93-9 US State Regulations Massachusetts Right To Know Components Phenol sulphuric acid Pennsylvania Right To Know Components Phenol sulphuric acid New Jersey Right To Know Components Phenol sulphuric acid California Prop 65 Components WARNING: this product contains a chemical known in the State of California to cause cancer. Components sulphuric acid

Other
Not available.

Section 16: Other Information

PCCA

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The information and recammendations contained in this Materia3 Safety Data Sheet have been compiled from sources believed to represent current opinion on the subject when the MSDS was prepared. The information and recommendations contained in this data sbeet are made withoui guarantee or representation as ta results. Yde su$gest that you evaluate these recommendations and suggestions in your ovn laboratory prior to use. Our responsibility for claims arising from breach of warramty, negligence, or otherwise is linrted to the purchase prise ofthe material. Freedom to use any patent ovned by anyone is not to be inferred Øm any statement coØed herein. With regard to the materiel, sener malees no waranty of any iånd whatever, express or implied, and all warranties or merchantability and fitness for a particular puØse are hereby disclaimed by seller.