

Section 1: Identification

- (a) Searene
- (b) Accessory Embalming Chemical
- (c) For use by professional licensed embalmers only
- (d) Manufacturer: Pierce Companies – 4722 Bronze Way – Dallas, TX 75236 – 214.333.4230
- (e) Emergency Phone Number: 800.424.9300

Section 2: Hazard Identification

This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200



Signal word: **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.
- H411 Toxic to aquatic life with long lasting effects.

Safety Precautions:

- P260 Do not breathe vapors
- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection

- P303
- P361
- P353 IF ON SKIN (or hair): Remove / take off immediately all contaminated clothing. Rinse skin with water/shower.

- 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

Safety Data Sheet: Searene (Item #PW0463600)

P403

P233 Store in a well-ventilated place. Keep container tightly closed.

R Phrases:

R23/244/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns

R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R68 Possible risk of irreversible effects.

S Phrases:

S (1/2) Keep locked up and out of the reach of children.

S 9 Keep container in a well-ventilated place.

S 20 When using do not eat or drink.

S 23 Do not breathe gas/fumes/vapor/spray.

S 24/25 Avoid contact with skin and eyes.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 27/28 After contact with skin, take off immediately all contaminated clothing and wash immediately with plenty of polyethylene glycol or water.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident if you feel unwell, seek medical advice immediately (show the label where possible).

S 60 This material and its container must be disposed of as hazardous waste.

Classification of the substance or mixture:

Classification according to EC regulation 1272/2008 (CLP):

Acute Tox. 3; H301	Toxic if swallowed
Acute Tox. 3; H311	Toxic in contact with skin.
Acute Tox. 3; H331	Toxic if inhaled.
Skin Corr. 1 B; H314	Causes severe skin burns and eye damage
Muta. 2; H341	Suspected of causing genetic defects.
STOT RE 2; H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 2; H411	Toxic to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or 1999/45/EC:

Muta. Cat. 3; R68 Possible risk of irreversible effects.

T; R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

Xn; R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

Other hazards:

After resorption: Injuries of the internal organs, liver, kidneys, heart.

Strong skin absorption as main danger of phenol poisoning at the workplace with paralysis of the central nervous system (with lethal consequences in severe cases) as well as liver and kidney damage.

Safety Data Sheet: Searene (Item #PW0463600)

Section 3: Composition/Information on Ingredients

CHEMICAL NAME	CAS NUMBER	%	Trade Secret Information: Exact % of concentration is withheld to protect Trade Secret Information. Ranges are given in accordance with CFR 29.1910.1200(i), Appendix E
Phenol	108-95-2	30 – 40	
Caustic Potash	1310-58-3	1 – 10	

Section 4: First-Aid Measures

Description of first aid measures

- General information:** First aider: Pay attention to self protection!
Move victim to fresh air, put at rest and loosen restrictive clothing. Remove contaminated clothing. If victim is at risk of losing consciousness, position and transport on their side.
- In case of inhalation:** Provide for adequate fresh air. If breathing becomes irregular ceases, apply mouth-to-mouth resuscitation or artificial respiration immediately, where required supply oxygen. Immediately get medical attention.
- In case of skin contact:** Take off immediately all contaminated clothing. Immediately get medical attention. In case of contact with the skin, immediately wash with polyethylene glycol. Then wash with water.
- After eye contact:** Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently seek the immediate attention of an ophthalmologist.
- After swallowing:** Rinse mouth immediately and drink plenty of water. Do not induce vomiting. Immediately get medical attention.

Most important symptoms and effects, both acute and delayed

- In case of inhalation:** Mucous membrane irritation, cough, shortage of breath, damage of respiratory tract.
- After contact with skin:** Strong skin absorption as main danger of phenol poisoning at the workplace with paralysis of the central nervous system (with lethal consequences in severe cases) as well as liver and kidney damage.

Indication of any immediate medical attention and special treatment needed:

Symptoms and dangers:

No specific antidote therapy for phenol poisoning is known. Therefore it is important to remove the phenol completely from the body surface and out of the body as quickly as possible, and in the cases of inhalation prophylactic treatment to prevent pulmonary oedema is of great importance. Phenol causes strong caustic burns of the skin and mucous membranes due to its protein degenerating action. The skin initially discolours white, later red. After initial pain, local anaesthesia appears. Absorptive poisoning by large amounts of phenol is possible also through small affected skin regions and quickly leads to paralysis of the central nervous system as well as strong depression of the body temperature. Inhaling phenol vapors can lead to damage of the bronchial system and pulmonary oedema. Systemic damage to kidneys, liver and heart as well as neuropsychiatric disturbances are produced.

Treatment:

Thoroughly clean the wetted skin areas, if possible with polyethyleneglycol (e.g. polyethylene glycol 300). In case of eye contact, rinse copiously with water, in case of burns rinse continuously with water as far as possible and take to an eye specialist or eye clinic. In case of inhalation, to prevent pulmonary oedema, initiate inhalative cortisone therapy as early as possible (e.g. every 10 minutes 5 strokes of cortisone containing aerosol dosing spray); administer codeine against dry coughing. In case of commencing or manifested pulmonary oedema, systemic administration of cortisone. Caution: A

Safety Data Sheet: Searene (Item #PW0463600)

low symptom or symptom-free interval is possible. If swallowed, gastric lavage after intubation, activated charcoal, saline laxative.

Section 5: Fire-fighting Measures

Extinguishing Media:

Suitable Extinguishing Media: Extinguishing Powder, Alcohol Resistant Foam, Carbon Dioxide, Water Fog

Extinguishing Media Which Must Not Be Used for Safety Reasons:

Full water jet.

Special Hazards arising from the substance or mixture:

Vapors are heavier than air and will spread at floor level.

In case of warming Development of explosive gas/vapors.

Hazardous vapors may form during fires.

In case of fire may be liberated: carbon monoxide and carbon dioxide.

Advice for Fire-Fighters:

Special Protective Equipment: Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Hazchem-code: 2X

Do not expose to high temperature. Danger of bursting and explosion. Move container away or cool with water from a protected position. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Remove all sources of ignition. Keep upwind. Do not breathe vapors. Avoid contact with the substance. Wear suitable protective clothing. Provide adequate ventilation. Leaks may be repaired only with full protection (tightly closing chemical protection clothing, respirator equipment independent of the ambient air).

Environmental precautions: Do not allow to penetrate into soil, water bodies or drains. Danger to drinking water when soaking into the soil or waters. In case of entry into waterways, soil or drains, inform the responsible authorities.

Methods and materials for containment and cleaning up: Allow the leaked product to solidify if this is possible without endangering people. Take up mechanically, placing in appropriate containers for disposal. Phenol, liquid: Collect spillage. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid-or universal binding agents) and place in closed containers for disposal. Final cleaning. Collect the rinsing water when cleaning-down contaminated equipment and plant components (to prevent phenol from escaping into deep soil layers).

Reference to other sections: Refer additionally to section 8 and 13.

Safety Data Sheet: Searene (Item #PW0463600)

Section 7: Handling and Storage

Precautions for Safe Handling:

Advices on safe handling:

Execute works under fume hood. Do not inhale substance.
Avoid contact with skin, eyes and clothing.
The material is to be handled with extreme caution.
Requires good ventilation.
Welding operations are permitted only under supervision.

Precautions against fire and explosion:

Keep away from sources of ignition. No smoking.

Conditions for safe storage, including any incompatibilities:

Requirements for storerooms and containers:

Keep containers tightly closed and at a temperature between 15°C and 25°C

Solidification point:

Water content: 80%, 20%: 5°C

Water content: 90%, 10%: 12.3°C

Water content: 95%, 5%: 22.9°C

Keep container in a well-ventilated place. Protect from light.

Suitable material: steel or Refined steel.

Keep locked up. Only trained personnel may be allowed to enter storage area.

Hints on joint storage:

Do not store together with food. Do not store together with:

Solvent, aluminum, aldehydes, halogens, hydrogen peroxide, oxidizing agents, strong acids, strong bases, formaldehyde, nitrites, nitrates, halogenates, peroxide compounds.

Section 8: Exposure Controls/Personal Protection

Control parameters

Occupational exposure limit values:

CHEMICAL NAME	CAS NUMBER	PEL OSHA	TLV-ACGIH
Phenol	108-95-2	5 ppm TWA	5 ppm TWA, 10 ppm STEL
Caustic Potash	1310-58-3	2 mg/ m ₃	2 mg/ m ₃

Additional information:

All exposure relevant information (human health and environment) is summarized in annexes to this safety data sheet.

Exposure controls:

Execute works under fume hood. Do not inhale substance.
The substance should only be handled in closed apparatus or systems.
Process exhaust through separator/filter as needed.

Personal Protection Equipment:

Occupational exposure controls:

Respiratory Protection:

Respiratory protection must be worn whenever above levels have been exceeded.

Hand protection:

Protective gloves according to EN 374.

Safety Data Sheet: Searene (Item #PW0463600)

Glove material: Neoprene, PVC

Breakthrough time: 140 min (Neoprene); 75 min (PVC)

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Goggles (DIN EN 58211) or face protection shield.

Body Protection: Wear suitable protective clothing. Material: PVC
Safety shoes according to EN 345-347

General protection and hygiene measures:

Avoid contact with skin and eyes. Take off immediately all contaminated clothing.

When using do not eat, drink or smoke.

Have eye wash bottle or eye rinse ready at work place.

Keep away from food, drink and animal feeding stuffs.

Preventative skin protection. Wash hands before breaks and immediately after handling the product. Then apply enough skin protecting cream.

Alternatives to the personal protective measures as mentioned can only be determined in agreement with a responsible safety expert.

Section 9: Physical and chemical properties

FLASH POINT: >212°F (ASTM D93)

BOILING POINT: 214°F

EVAPORATION RATE (BUTYL ACETATE=1): >1

MELTING POINT: No information

pH: 8.35

SOLUBILITY IN WATER: No information

APPEARANCE AND ODOR INFORMATION: Opaque liquid / violet – phenolic odor

FLAMMABLE LIMITS: n/a

SPECIFIC GRAVITY (WATER=1): 1.05 g/ml

VAPOR DENSITY (AIR=1): 0.6

VAPOR PRESSURE (mm HG): 21.1 mm @ 73°F

% VOLATILE BY WEIGHT: No information

Section 10: Stability and Reactivity

UNSTABLE: NO

STABLE: YES

Reactivity:

No dangerous reactions are known.

Chemical Stability:

Product is stable under normal storage conditions.

Possibility of hazardous reactions:

No dangerous reactions are known.

Conditions to avoid:

No decomposition when used properly.

It may react to form catechol, hydroquinone, as a result of radical formation.

Avoid ignitable vapor-air-mixtures.

Incompatible Materials:

Oxidizing agents, aldehydes, isocyanates, nitrites, nitrides, Friedel-Crafts catalysts.

Unsuitable materials: Metals, Rubber, various plastics, alloys.

Hazardous Decomposition Products:

In case of fire may be liberated: Carbon Monoxide and Carbon Dioxide.

Thermal Decomposition:

No data available.

Section 11: Toxicological Information

Toxicological information on this product or its components appear in this section when such data is available.

Information on Toxicological Effects:

Acute Toxicity:

LD50 Rat, oral:	Information about Phenol: 340 mg/kg bw (OECD 401)
LDLo human, oral:	Information about Phenol: 140 mg/kg bw
LD50 Rat, dermal:	Information about Phenol: 660 mg/kg bw (OECD 402)
LC50 Rat, inhalative:	Information about Phenol: >900 mg/m ³ /8h

Toxicological effects:

Acute toxicity (oral): Acute Tox. 3; H301 = Toxic if swallowed.

Acute toxicity (dermal): Acute Tox. 3; H311 = Toxic in contact with skin

Acute toxicity (inhalative): Acute Tox. 3; H331 = Toxic if inhaled.

Skin corrosion / irritation, eye damage/irritation: Skin corr. 1B; H314 = Causes severe skin burns and eye damage.

Sensitization to the respiratory tract: Lack of data.

Skin sensitization: Based on available data, the classification criteria are not met. Not known to cause sensitization.

Germ cell mutagenicity/Genotoxicity: Muta. 2; H341 = Suspected of causing genetic defects.

Mutagenicity: Bacterial mutagenicity: negative

Chromosomal aberrations in-vitro: positive

Micronucleus test: in-vitro: positive

Gene-mutations mammalian cells in-vitro: positive

Sister chromatid exchange in-vitro: positive

Micronucleus test: in-vivo: weak positive

Carcinogenicity: Based on available data, the classification criteria are not met. Specific symptoms in animal studies: None carcinogenic effect.

Reproductive toxicity: Based on available data, the classification criteria are not met.

Specific symptoms in animal studies: No reproductive hazards have been observed.

Effects on or via lactation: Lack of data

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): STOT RE 2; H373 = May cause damage to organs through prolonged or repeated exposure. Specific target organ toxicity: Harmful effects are not known.

Aspiration hazard: lack of data

Carcinogenic, germ cell mutagen and reproduction effect:

Muta. Cat 3 – Possible risk of irreversible effects.

Other information: Strong skin absorption as main danger of phenol poisoning at the workplace with paralysis of the central nervous system (with lethal consequences in severe cases) as well as liver and kidney damage.

Symptoms: In case of inhalation:

Mucous membrane irritation, cough, shortage of breath, damage of respiratory trace

After contact with skin:

Strong skin absorption as main danger of phenol poisoning at the workplace with paralysis of the central nervous system (with lethal consequences in severe cases) as well as liver and kidney damage.

Section 12: Ecological Information

PHENOL

Toxicity:

Aquatic toxicity: Harmful to aquatic life with long lasting effects.
Information about Phenol:
Algae toxicity:
EC50 Pseudokirchnerella subcapitata, (freshwater, cell number): 61.1 mg/L 96H
EC50 Entomoneis cf punctulata, (marine water, growth rate): 76 mg/L/72h
Bacterial toxicity:
IC50 Mitrosomonas sp: 21 mg/L/24h
Daphnia toxicity:
EC50 Ceriodaphnia dubia: 3.1 mg/L 48h
Fish toxicity:
LC50 Oncorhynchus mykiss: 8.9 mg/L/96h
Long term fish toxicity:
60 d NOEC (Cirrhina mrigala): 0.077 mg/L
Long term daphnia toxicity:
16 d EC10 (Daphnia magna, growth): 0.46 mg/L

Persistence and Degradability:

Further details: Information about Phenol:
Abiotic degradation:
Air (Indirect photodegradation by reaction with OH radicals.) : half-time (DT50) approx: 14 d
Water: Not susceptible to hydrolysis.
Biodegradation:
Activated sludge: 62%/100h, readily biodegradable (OECD 301C).
Activated sludge (anaerobic): 80.1%/50d, rapidly biodegradable under anaerobic conditions (ECETOC method).
Water: 86 – 96% / 20d, easily biodegradable (BOD-test APHA)
COD: 2.3 g/g
ThOD: 2.26 mg/L

Bioaccumulative Potential: Information about Phenol:
Significant bioaccumulation potential is not to be expected.
Bioconcentration factor (BCF): 17.5 (fish: Danio rerio)

Mobility in Soil: Information about Phenol:
Adsorption coefficient:
Koc: 82.8 L/kg at 20°C (calculated is log Pow).
The soil sorption coefficient indicates a low sorption of phenol onto soil organic matter.
Evaporation rate (Volatilisation) at 20°C: $H=0.022 \text{ Pa}\cdot\text{m}^3/\text{mol}$.
The calculated Henry's Law constant indicates a low to moderate volatility from aqueous solution.

Results of PBT and vPvB

Safety Data Sheet: Searene (Item #PW0463600)

Assessment: This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

Other Adverse Effects: Do not allow to enter into ground-water, surface water or drains.

Section 13: Disposal Considerations

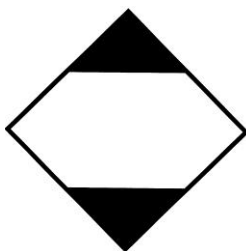
Recommendation: Incinerate according to applicable local, state and federal regulations.
Discharge into the environment must be avoided.

Contaminated packaging Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.

Empty bottles: DO NOT RECYCLE!

Section 14: Transport Information

DOT/UN HAZARD CLASSIFICATION: N/A



Section 15: Regulatory Information

Safety, Health and Environmental Regulations / Legislation Specific for the substance or mixture:

National regulations – Great Britain

Hazchem-code: 2X

National regulations – US

TSCA Inventory – Not listed

Hazard Rating Systems:

NFPA Hazard Rating:

Health: 4 (Severe)

Fire : 2 (Moderate)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 4 (Severe) – Chronic Effects

Flammability: 2 (Moderate)

Physical Hazard: 0 (Minimal)

Personal Protections: X = Consult your physician

Section 16: Other Information

Further Information:

Wording of the H-phrases

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

H411 = Toxic to aquatic life with long lasting effects.

Wording of the R-phrases

R 23 / 24 / 25 = Toxic by inhalation, in contact with skin and if swallowed.

R34 = causes burns

R 48/20/21/22 = Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R68 = Possible risk of irreversible effects.

Literature: REACH Registration Dossier Phenol. P&D REACH Consortium, 2010

Information Source and References

This SDS is prepared by Pierce Companies Regulatory Department referencing the SDS from the Manufacturer who supplies the hazardous ingredients in our finished product.

Prepared by:

Pierce Companies Regulatory Department

Date of Preparation/Revision:

June 17, 2015

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