

**1. Product and Company Identification**

**Product Name:** SQS04 Part B  
**Supplier:** NRI 3875 Fiscal Court, Ste #100 Riviera Beach, FL 33404 (561) 683-6992  
**Emergency Phone Number:** 800-535-5053  
**Product Description:** Polyamine Formulation  
**Product Use:** Intended to repair pipes  
**Chemical Name or Synonym:** N/A

**2. Hazards Identification**

**Classification of the substance or mixture**

Eye damage/eye irritation – Category 1  
Skin corrosion/irritation – Category 2  
Acute toxicity dermal – Category 4  
Sensitization/skin – Category 1  
Germ Cell Mutagenicity – Category 2  
STOT (RE) – Category 2

**Label Elements:**



**Hazard Statements:**

H318 Causes serious eye damage  
H315 Causes skin irritation.  
H312 Harmful in contact with skin.  
H317 May cause an allergic skin reaction  
H341 Suspected of causing genetic defects  
H373 May cause damage to organs through prolonged or repeated exposure.

**Signal Word:** DANGER!

**Precautionary Statement:**

P272 Contaminated work clothing should not be allowed out of the workplace.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
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.  
P308+P313 If exposed or concerned: Get medical advice/attention

**National Fire Protection Association Hazard Ratings – NFPA(R):**

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Health Hazard: 2  
Fire: 1  
Reactivity: 0

**3. Composition/ Information on Ingredients**

Component	CAS #	% Composition
Triethylenetetramine, reaction products with phenol / formaldehyde	32610-77-8	50-100
Phenol	108-95-2	10-25
Triethylenetetramine	112-24-3	10-25

**4. First Aid Measures**

**First Aid Measures for Accidental:**

**Eye Exposure:** Seek immediate medical advice. Rinse immediately with plenty of water for at least 15 minutes.

**Skin Exposure:** Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately.

**Inhalation:** In case of unconsciousness place patient stably in side position for transportation. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

**Ingestion:** Do not induce vomiting. Drink copious amounts of water and provide fresh air. Immediately call a doctor. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.

**Most important symptoms/effects, acute and delayed:** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**Indication of immediate medical attention and special treatment needed:**

Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident.

Application of corticosteroid cream has been effective in treating skin irritation.

**5. Fire Fighting Measures**

**Suitable Extinguishing Media:** Alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>), dry chemical, dry sand & limestone powder.

**Unsuitable Extinguishing Media:** No further relevant information available.

**Special Protective Equipment and Precautions for Fire-fighters:** Avoid contact with the skin. Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

**Specific Hazards Arising from the Chemical (Under Fire Conditions):** May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes.

**6. Accidental Release Measures**

**Personal Precautions, Protective Equipment and Emergency Procedures:** Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

**Environmental Precautions:** Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.

**Methods and Materials for Containment and Cleaning Up:** Use neutralizing agent. Dispose contaminated material as waste according to item 13. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation

**7. Handling and Storage**

**Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols. Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer causing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke.

**Conditions for safe storage including any incompatibilities:** Store in original container protected from direct sunlight in a dry, cool and well-ventilated area. Do not store together with oxidizing and acidic materials. Keep container tightly closed and sealed until ready for use.

**8. Exposure Controls / Personal Protection**

**Components with limit values that require monitoring at the workplace:**

Phenol (108-95-2)	
PEL	Long term value: 19 mg/m <sup>3</sup> , 5ppm (skin)
REL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm
	Ceiling limit value: 60 mg/m <sup>3</sup> , 15.6 ppm (15-min; Skin)
TLV	Long-term value: 19 mg/m <sup>3</sup> , 5ppm (Skin; BEI)
Triethylenetetramine (112-24-3)	
WEEL	Long term value: 6mg/m <sup>3</sup> , 1 ppm (skin)

**Ingredients with biological limit values:**

Phenol (108-95-2)	
	BEI: 250 mg/g creatinine. Medium: urine. Time: end of shift. Parameter: phenol with hydrolysis (background, nonspecific)

**Appropriate Engineering Controls:** Ventilation must be adequate for most operations.

**Personal Protective Equipment:**

**Respiratory Protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

**Eye / Face Protection:** Tightly sealed goggles.

**Skin Protection:** Wear impermeable and resistant protective gloves (Neoprene, PVC, Butyl-rubber, & Nitrile rubber). Impervious protective clothing.

**Additional protective measures:** Keep away from foodstuffs, beverages and feed. Store protective clothing separately. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin. Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers. Wash at the end of each work shift and before eating, smoking or using the toilet. Remove contaminated clothing. Drench affected area with water for at least 15 minutes

**9. Physical and Chemical Properties**

<b>Physical State:</b>	Liquid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Amine-like
<b>Melting Point/ Freezing Point:</b>	No
<b>Boiling point:</b>	181 °C (358 °F)
<b>Flammability (solid, gas):</b>	Not applicable
<b>Lower and Upper Explosion limits:</b>	Lower: 1.3 Vol % Upper: 9.5 Vol %
<b>Flash Point:</b>	82 °C (180 °F)
<b>Ignition Temperature:</b>	335 °C (635 °F)

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<b>Auto-igniting:</b>	Product is not selfigniting.
<b>Decomposition Temperature:</b>	No data available
<b>pH:</b>	No data available
<b>Kinematic Viscosity:</b>	No data available
<b>Solubility:</b>	Not miscible or difficult to mix in water.
<b>Evaporation rate (ether=1):</b>	No data available
<b>Flammability Limits in Air:</b>	Not established for this product
<b>Solubility in other solvents:</b>	No data available
<b>Partition coefficient (n-octanol/water):</b>	No data available
<b>Vapour Pressure:</b>	0.3 hPa (at 20 °C/ 68 °F)
<b>Density and/or Relative Density:</b>	No data available
<b>Relative Vapour Density:</b>	No data available
<b>Particle Characteristics:</b>	No data available
<b>Organic Solvent Content:</b>	0.0%
<b>Solids Content:</b>	99.3%
<b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>Other information:</b>	No further relevant information available.

**10. Stability and Reactivity**

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.

**Chemical Stability:** Stable under standard use and storage conditions.

**Possibility of Hazardous reactions:** No dangerous reactions known.

**Conditions to Avoid:** No further relevant information available.

**Incompatible Materials / Chemicals:** Sodium hypochlorite. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Nitrous acid and other nitrosating agents. Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. Oxidizing agents.

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.

**Hazardous Decomposition Products:** Nitric acid. Ammonia. Nitrogen oxides (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Aldehydes. Flammable hydrocarbon fragments (e.g., acetylene). Nitrosamine.

**11. Toxicological Information**

**Acute toxicity:**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Triethylenetetramine, reaction products with phenol / formaldehyde	2,200 mg/kg (rat)	-	>20 mg/l (rat, 4h)
Phenol	317 mg/kg (rat)	850 mg/kg (rabbit)	-
Triethylenetetramine	2500 mg/kg (rat)	805 mg/kg (rabbit)	-

**Information in the likely route of exposure:**

On the skin: Caustic effect on skin and mucous membranes.

On the eye: Strong caustic effect.

Sensitization: May cause sensitization by skin contact. Sensitization has occurred in laboratory animals after repeated exposures.

**Potential Acute Health Effects:** No specific data.

**Symptoms related to the physical, chemical and toxicological characteristics:** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**Delayed and immediate effects and also chronic effects from short and long term exposure:** Repeated or prolonged contact causes sensitization, asthma and eczemas.

Target Organs : Skin. Eyes. Kidney. Liver. Pancreas. Spleen.

Aggravated Medical Condition: Liver disorders Kidney disorders Skin disorders and Allergies. Eye disease.

**Chronic Health Hazard:** Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity. Adsorption of phenolic solutions through the skin may be very rapid and can cause death. Lesser exposures can cause damage to the kidneys, liver, pancreas and spleen, and edema of the lungs. Chronic exposures can cause death from liver and kidney damage.

**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations: Toxic, corrosive, irritant. Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**Carcinogenic Categories:**

IARC (International Agency for Research on Cancer):

Phenol (108-95-2): 3

Carbon black wetted form, non-particulate (1333-86-4): 2B

NTP (National Toxicological Program): None of the ingredients is listed

OSHA-Ca (Occupational Safety & Health Administration): None of the ingredients is listed

## 12. Ecological Information

**Aquatic toxicity:** No further relevant information available.

**Persistence and degradability:** No further relevant information available.

**Bioaccumulative potential:** No further relevant information available.

**Mobility in soil:** No further relevant information available.

**Ecotoxicological effects:** Toxic for fish

**Additional ecological information:**

**General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized. Danger to drinking water if even small quantities leak into the ground.

**Results of PBT and vPvB assessment:** Not Applicable

**Other adverse effects:** No further relevant information available.

## 13. Disposal Considerations

**Waste treatment methods:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Uncleaned packaging:** Disposal must be made according to official regulations. Dispose of in accordance to all local, state, and/or national legislation.

**14. Transport Information**

**DOT/ ADR/ IMDG/ IATA**

**Proper Shipping Name:** Not Regulated  
**UN-Number:** N/A  
**Hazard Class:** N/A  
**Packing Group:** N/A  
**Marine Pollutant:** N/A

**15. Regulatory Information**

**SARA Regulations:**

**Section 355 (Extremely hazardous substance):** Phenol (108-95-2)

**Section 313 (Specific toxic chemical listings):** Phenol (108-95-2)

**TSCA (Toxic Substance Control Act):** All ingredients are listed.

**Proposition 65:**

**Chemicals known to cause cancer:**

Carbon black wetted form, non-particulate (1333-86-4)

**Chemicals known to cause reproductive toxicity to females:** None of the ingredients is listed

**Chemicals known to cause reproductive toxicity to males:** None of the ingredients is listed

**Chemicals known to cause development toxicity:** None of the ingredients is listed

**New Jersey Right-to-Know List:** None of the ingredients is listed

**Pennsylvania Right-to-Know List:** None of the ingredients is listed

**Carcinogen categories:**

**EPA (Environmental Protection Agency):** Phenol (108-95-2)

**TLV (Threshold Limit Value established by ACGIH)**

Phenol (108-95-2)

Carbon black wetted form, non-particulate (1333-86-4)

**NIOSH-Ca (National Institute for Occupational Safety and Health):** Carbon black wetted form, non-particulate (1333-86-4)

**16. Other Information**

**Key Legend Information:**

N/A – Not Applicable

ND – Not Determined

ACGIH – American Conference of Governmental Industrial Hygienists

PEL – Permissible Exposure Limit

IMDG – International Maritime Code for Dangerous Goods

DOT – US Department of Transportation

IATA – International Air Transport Association

The information contained herein is based on the data available to us and is believed to be accurate. The data is offered in good faith as typical values and not as product specification. The information in this data sheet was compiled from information supplied by the vendors of the components of this compound. NRI makes no warranty either expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The recommended industrial hygiene and safe handling procedures are believed to be genuinely applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. NRI assumes no responsibility for injury from the use of the product described herein. The information is intended only to assist in the safe handling of this material.

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