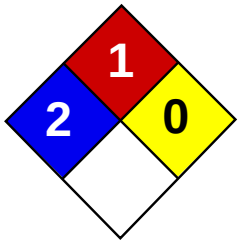

Material Safety Data Sheet
Nonoxynol-9 MSDS

Section 1: Chemical Product and Company Identification

Product Name: Nonoxynol-9

Catalog Codes: SLN1945

CAS#: 26027-38-3 or 127087-87-0

RTECS: MD0906000

TSCA: TSCA 8(b) inventory: Nonoxynol-9 (p-Nonylphenyl, ethoxylated)

CI#: Not available.

Synonym: Tergitol NP-9, Surfactant Nonoxynol 9; Polyoxyethylene nonyl phenyl ether; Ethoxylated nonylphenol

Chemical Name: Nonylphenyl Polyethylene Glycol Ether

Chemical Formula: Not available.

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Nonoxynol-9 (p-Nonylphenyl, ethoxylated)	26027-38-3 or	100
	127087-87-0	

Toxicological Data on Ingredients: Nonoxynol-9: ORAL (LD50): Acute: 1410 mg/kg [Rat]. 4290 mg/kg [Mouse]. DERMAL (LD50): Acute: 2830 mg/kg [Rabbit].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: OPEN CUP: 279°C (534.2°F) (Cleveland.).

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: Not available.

Color: Colorless.

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: 1.055 @ 25 C(Water = 1)

Vapor Pressure: Not available.

Vapor Density: >1 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Non-ionic.

Dispersion Properties: See solubility in water.

Solubility: Soluble in cold water, hot water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability:
Avoid prolonged excess heat which may cause product decomposition. Avoid incompatible materials such as strong bases strong acids, strong oxidizing agents and materials reactive with hydroxyl compounds.

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Not available.

Special Remarks on Reactivity:
Normally unreactive. However, avoid strong bases at high temperatures, strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

Toxicity to Animals:
Acute oral toxicity (LD50): 1410 mg/kg [Rat]. Acute dermal toxicity (LD50): 2830 mg/kg [Rabbit].

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material and cause adverse reproductive effects and birth defects based on animal studies.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: May cause skin irritation. However, brief contact is not known to be irritating. Eyes: Causes severe eye irritation and conjunctivitis with possible chemical burns of the eye. Ingestion may cause abdominal discomfort, nausea, vomitting, and diarrhea. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury. May affect behavior(somnolence, tremor), respiratory system (acute pulmonary edema), metabolism and liver. Inhalation: Mist may cause irritation of the respiratory tract experienced as nasal discomfort and discharge with chest pain and coughing. May affect respiration experienced as audible respiration, and mouth breathing, and distended abdomen. Exposure to high aerosol concentrations for a prolonged period of time may result in suffocation. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause irritaiton and dermatitis. Prolonged or widespread contact may result in absorption of potentially harmful amounts and may cause abdominal discomfort, nausea, vomitting, and diarrhea. Ingestion: Prolonged or repeated ingestion may affect the liver and metabolism. Animal studies also indicate that continuous exposure to high concentrations may be toxic to the kidneys.

Section 12: Ecological Information

Ecotoxicity:
Ecotoxicity in water (LC50): 21.4 mg/l 48 hours [Daphnia]. 6.6 mg/l 96 hours [Daphnia]. 7.7 mg/l 96 hours [Fish (Fathead Minnow)]. 4.8 mg/l 96 hours [Fish (Fathead Minnow)]. 6.6 mg/l 96 hours [Fish (Fathead Minnow)].

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation:
Avoid discharge into natural waters. Microbial degradation results in some intermediates that have shown weak estrogen memetic activity. These effects have been observed in labaoratory studies only at concentrations of these degradation intermediates greater than those required for eliciting conventional toxicity in the most sensitive aquatic organisms (approx. 5 ppm). Therefore conventional toxicity remains the more sensitive indicator of environmental exposure to degradation of intermediates of NPES.

Section 13: Disposal Considerations

Waste Disposal:
For disposal of aqueous surfactant solutions: Aerobic biological wastewater treatment systems are effective in treating aqueous solutions of surfactants. Removal efficiency will depend upon treatment plant conditions. As with any waste water, consultation with local treatment plant staff is recommended (and required by law). Before disposal, in activated sludge treatment systems, inlet concentrations below 5 mg/l have been treated without foaming problems. For disposal of neat unused surfactant: Incinerate in a furnace where permitted under federal, state and local regulations. Surfactants can cause foaming problems in biological treatment plants and other high shear operations. For disposal of neat, unused surfactant, incinerate in a furnace where permitted under Federal, State, and Local regulations. Dispose in accordance with applicable Federal, State, and Local environmental regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
TSCA 8(b) inventory: Nonoxynol-9 (p-Nonylphenyl, ethoxylated TSCA 8(a) PAIR: Nonoxynol-9 (p-Nonylphenyl, ethoxylated

Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):
R22- Harmful if swallowed. R36/38- Irritating to eyes and skin. R51- Toxic to aquatic organisms. S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately and show this container or label. S56- Dispose of this material and its container at hazardous or special waste collection point.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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