Nonoxynol, n=9: sc-204821

MATERIAL SAFETY DATA SHEET

NFPA	HMIS	Personal Protective Equipment
		 See Section 15.

Section 1. Chemical Product and Company Identification

Common Name/ Trade Name	**Nonoxynol, n=9**
Commercial Name(s)	Not available.
Synonym	Nonylphenol octa(oxyethylene)ethanol; Nonaethylene glycol mono(nonylphenyl) ether; Nonaethylene glycol nonylphenyl ether
Chemical Name	3,6,9,12,15,18,21,24-Octaoxahexacosan-1-ol, 26-(nonylphenoxy)-
Chemical Family	Non-ionic surfactant
Chemical Formula	Not available.
Supplier	Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800

Catalog Number(s).	sc-204821
CAS#	26571-11-9
RTECS	Not available.
TSCA	TSCA 8(b) inventory: Nonoxynol-9
CI#	Not available.

IN CASE OF EMERGENCY

ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

Section 2.Composition and Information on Ingredients

		Exposure Limits			
Name	**CAS #**	**TWA (mg/m³)**	**STEL (mg/m³)**	**CEIL (mg/m³)**	**% by Weight**
1) Nonoxynol-9	26571-11-9				100

Toxicological Data on Ingredients Not applicable.

Section 3. Hazards Identification

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

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 if irritation occurs.

Skin Contact Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact	Not available.
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. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
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	CLOSED CUP: 197°C (386.6°F) - 238 C..
Flammable Limits	Not available.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of open flames and sparks, 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. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

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	Safety glasses. Synthetic apron. Gloves (impervious). Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. 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.
Molecular Weight	Not available.
pH (1% soln/water)	Not available.

Odor	Not available.
Taste	Not available.
Color	Colorless to light yellow.

Boiling Point	250°C (482°F)
Melting Point	5°C (41°F) - 6 C.
Critical Temperature	Not available.
Specific Gravity	1.06 (Water = 1)
Vapor Pressure	<0.1 kPa (@ 20°C)
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): 3310 mg/kg [Rat]. Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit].
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: May cause skin irritation. I may be absorbed through the skin, but not in harmful quantities. Eyes: Can cause eye irritation. 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), and liver. Inhalation: Inhalation of mist or vapor may cause irritation of the upper respiratory tract (nose, throat) experienced as nasal discomfort and discharge with chest pain and coughing. Inhalation of mist or vapor may also cause headache, nausea, drowsiness. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause irritaiton and dermatitis. Ingestion: Prolonged or repeated ingestion may affect the liver and metabolism (weight loss). Animal studies also indicate that continuous exposure to high concentrations may be toxic to the kidneys.

Section 12. Ecological Information

Ecotoxicity	Not available.
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	Not available.
Special Remarks on the Products of Biodegradation	Not available.

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.
DOT (Pictograms)	

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations	TSCA 8(b) inventory: Nonoxynol-9 (p-Nonylphenyl, ethoxylated TSCA 8(a) PAIR: Nonoxynol-9 (p-Nonylphenyl, ethoxylated
California Proposition 65 Warnings	California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found. California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations	EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 247-816-5). Canada: Listed on Canadian Non-Domestic Substance List (NDSL). China: Not listed on National Inventory. Japan: Not listed on National Inventory (ENCS). Korea: Not listed on National Inventory (KECI). Philippines: Not listed on National Inventory (PICCS). Australia: Listed on AICS.	
Other Classifications	**WHMIS (Canada)**	Not controlled under WHMIS (Canada).
	DSCL (EEC)	R36- Irritating to eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	a

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

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment

Not applicable.
Lab coat.

Not applicable.
Safety glasses.

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

11/8/2010