1. Product Identification

**Synonyms:** Glycols, polyethylene, mono(p-nonylphenyl)ether; Nonoxynol-9; NP-9; N-9  
**CAS No.:** 26027-38-3  
**Molecular Weight:** Not applicable  
**Chemical Formula:** \((\text{C}_2\text{H}_4\text{O})_n \cdot \text{C}_{15}\text{H}_{24}\text{O}\)  
**Product Codes:** V312

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy</td>
<td>26027-38-3</td>
<td>90 - 100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. Hazards Identification

**Emergency Overview**

CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.
J.T. Baker SAF-T-DATA™ Ratings (Provided here for your convenience)

Health Rating: 1 - Slight
Flammability Rating: 1 - Slight
Reactivity Rating: 1 - Slight
Contact Rating: 2 - Moderate
Lab Protective Equip: GOGGLES; LAB COAT
Storage Color Code: Orange (General Storage)

Potential Health Effects

There is limited information available on the hazards of this chemical. The health effects listed for this substance are based on information found for compounds of similar structure.

**Inhalation:**
May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

**Ingestion:**
Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

**Skin Contact:**
May cause irritation with redness and pain.

**Eye Contact:**
May cause irritation, redness and pain. In general, for nonionic surfactant compounds, mild eye irritation is common; some compounds (comparatively more alkaline) will produce more severe irritation and possibly result in eye injury.

**Chronic Exposure:**
No information found.

**Aggravation of Pre-existing Conditions:**
No information found.

4. First Aid Measures

**Inhalation:**
Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:**
Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:**
Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.
Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

5. Fire Fighting Measures

Fire:
Flash point: 197°C (387°F) CC
As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire.

Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Move exposed containers from fire area, if it can be done without risk. Use water to keep fire-exposed containers cool.

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
None established.

**Ventilation System:**
A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**
For conditions of use where exposure to the substance is apparent, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**
Wear protective gloves and clean body-covering clothing.

**Eye Protection:**
Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

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### 9. Physical and Chemical Properties

**Appearance:**
Light yellow liquid.

**Odor:**
Light odor.

**Solubility:**
Moderate solubility in water.

**Density:**
1.06

**pH:**
No information found.

**% Volatiles by volume @ 21°C (70°F):**
0

**Boiling Point:**
250°C (482°F)

**Melting Point:**
6°C (43°F)

**Vapor Density (Air=1):**
> 1

**Vapor Pressure (mm Hg):**
< 0.0 @ 20°C (68°F)

**Evaporation Rate (BuAc=1):**
< 0.0
10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Strong oxidizing agents, strong acids, strong bases.

Conditions to Avoid:
Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure. Investigated as a mutagen, reproductive effector.

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Ingredient                             Known    Anticipated    IARC Category
------------------------------------   -----    -----------    -------------
Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydr oxy-  (26027-38-3)    No          No            None

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12. Ecological Information

Environmental Fate:
No information found.

Environmental Toxicity:
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
14. Transport Information

Not regulated.

15. Regulatory Information

-------- \Chemical Inventory Status - Part 1\ -------------------------------
Ingredient                                                                 TSCA  EC  Japan  Australia
----------------------------------------------------------------------------
Poly(oxy-1,2-ethanediyl),.alpha.-(4-nonylphenyl)-.omega.-hydroxy-(26027-38-3)  Yes  No  Yes  Yes

-------- \Chemical Inventory Status - Part 2\ -------------------------------
Ingredient                                                                 Korea  DSL  NDSL  Phil.
----------------------------------------------------------------------------
Poly(oxy-1,2-ethanediyl),.alpha.-(4-nonylphenyl)-.omega.-hydroxy-(26027-38-3)  Yes  Yes  No  Yes

-------- \Federal, State & International Regulations - Part 1\-----------------
Ingredient                                                                 -SARA 302-  ------SARA 313------
----------------------------------------------------------------------------
Poly(oxy-1,2-ethanediyl),.alpha.-(4-nonylphenyl)-.omega.-hydroxy-(26027-38-3)  No  No  No  No

-------- \Federal, State & International Regulations - Part 2\-----------------
Ingredient                                                                 CERCLA  261.33  8(d)
----------------------------------------------------------------------------
Poly(oxy-1,2-ethanediyl),.alpha.-(4-nonylphenyl)-.omega.-hydroxy-(26027-38-3)  No  No  Yes

Chemical Weapons Convention: No  TSCA 12(b): No  CDTA: No  SARA 311/312: Acute: Yes  Chronic: No  Fire: No  Pressure: No  Reactivity: No  (Pure / Liquid)

Australian Hazchem Code: No information found.
Poison Schedule: No information found.
WHMIS:
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.
16. Other Information

**NFPA Ratings:** Health: 1 Flammability: 1 Reactivity: 0

**Label Hazard Warning:**
CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

**Label Precautions:**
Avoid breathing vapor or mist.
Avoid contact with eyes, skin and clothing.
Keep container closed.
Use with adequate ventilation.
Wash thoroughly after handling.

**Label First Aid:**
If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

**Product Use:**
Laboratory Reagent.

**Revision Information:**
No changes.

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