SECTION 1: IDENTIFICATION

Product Name: NP-9

CAS Number: 127087-87-0

Chemical Name: NP-9

Synonyms: Nonylphenol, Ethoxylated; TERGITOL™ NP-9 Surfactant; Nonylphenol polyethylene glycol ether; poly(oxy1,2ethanediyl), alpha(4nonylphenyl)omega hydroxy, branched

Uses: Laboratory chemicals, Manufacture of substances

Company
Silver Fern Chemical, Inc.
2226 Queen Anne Avenue North
Suite #C
Seattle WA 98109, USA

24 Hour Emergency Contact
Infotrac 800-535-5053
Outside USA & Canada 352-323-3500

SECTION 2: HAZARD IDENTIFICATION

Danger

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Serious eye damage (Category 1), H318
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

Hazard statement(s):
H302 + H332 Harmful if swallowed or if inhaled
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s):
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P391 Collect spillage.
P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Content (W/W)</th>
<th>Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>127087-87-0</td>
<td>60-100%</td>
<td>NP-9</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

In case of skin contact: Wash off with soap and plenty of water. Consult a physician

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

Most important symptoms:
Eye contact: Causes eye irritation
Ingestion: May cause irritation to mouth, throat and stomach
Inhalation: no data available
Skin contact: no data available

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: 247 °C (477 °F) - closed cup - ASTM D 93

Lower/Upper explosion limit: no data available

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special hazards arising from the substance or mixture: Nature of decomposition products not known

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary
SECTION 6: ACCIDENTAL RELEASE MEASURES

Containment and Clean up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 7: HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Storage: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Combustible liquids.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal Protective Equipment (PPE)

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

General safety and hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Form: liquid/ Color: colorless
Odor: Mild
Odor Threshold: no data available
pH: 5 - 8 at 10 g/l - (as aqueous solution)
Melting point/freezing Point: Freezing point: 3.8 °C (38.8 °F)
Effective Date: 07/13/2015

**Initial boiling point and boiling range**
> 250 °C (> 482 °F) - Decomposes on heating

**Flash point**
247 °C (477 °F) - closed cup - ASTM D 93

**Evaporation rate**
no data available

**Flammability (solid, gas)**
no data available

**Upper/lower flammability or explosive limits**
no data available

**Vapor pressure**
< 0.01 hPa (< 0.01 mmHg) at 20 °C (68 °F)

**Vapor density**
no data available

**Specific gravity**
no data available

**Water solubility**
completely soluble

**Partition Coefficient:**
log Pow: 2.1 - 3.4

**n-octanol/water**

**Auto-ignition temperature**
no data available

**Decomposition temperature:**
no data available

**Viscosity:**
237 mm2/s at 25 °C (77 °F) -

**Explosive properties:**
no data available

---

**SECTION 10: STABILITY AND REACTIVITY**

**Conditions to avoid:** no data available

**Substances to avoid:** Strong acids, Strong bases, Strong oxidizing agents

**Hazardous reactions:** no data available

**Decomposition products:** no data available

---

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Acute toxicity:**
LD50 Oral - Rat - 960 - 3,980 mg/kg
LC50 Inhalation - Rat - 4 h - 1.15 mg/l
LD50 Dermal - Rabbit - 2,000 - 2,991 mg/kg

**Skin corrosion/irritation:** Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

**Serious eye damage/eye irritation:** Risk of serious damage to eyes.

**Respiratory or skin sensitization:** Patch test on human volunteers did not demonstrate sensitisation properties

**Germ cell mutagenicity:** In vitro tests did not show mutagenic effects

**Carcinogenicity:** Animal testing did not show any carcinogenic effects

**Reproductive toxicity:** Did not show teratogenic effects in animal experiments
Additional Information: RTECS: WZ4750000. Aspiration may cause pulmonary oedema and pneumonitis

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:
Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 3.8 - 6.2 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates: LC50 - Daphnia magna (Water flea) - 9.3 - 21.4 mg/l - 48 h
Toxicity to bacteria: IC50 - Bacteria - > 1,000 mg/l - 16 h

Biodegradability:
Result: < 60% - According to the results of tests of biodegradability this product is not readily biodegradable.

Bioaccumulative Potential:
Bioconcentration factor (BCF): 5.9 - 48

Other:
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects:
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal of substance: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material

Container disposal: Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

DOT (US)
Non-bulk in packages of 119 gallons or less
Not dangerous goods

BULK
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nonyphenol, ethoxylated)
Hazard Class: 9
ID Number: UN3082
Packing Group: 111
ERG: 171

IMDG
UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (α-(4-Nonylphenyl)-ω-hydroxy-poly(oxy-1,2-ethanediyl) branched)
Marine pollutant: yes

IATA
UN number: 3082 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. \((\alpha-(4-Nonylphenyl)-\omega-hydroxy-poly(oxy-1,2-ethanediyl) \text{ branched})\)

Further information:
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

SARA 302 Components:
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:
This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components:
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components:
\(\alpha-(4-Nonylphenyl)-\omega-hydroxy-poly(oxy-1,2-ethanediyl) \text{ branched} \) CAS-No. 127087-87-0

New Jersey Right To Know Components
\(\alpha-(4-Nonylphenyl)-\omega-hydroxy-poly(oxy-1,2-ethanediyl) \text{ branched} \) CAS-No. 127087-87-0

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Dam. | Serious eye damage |
| H302 | Harmful if swallowed. |
| H302 + H332 | Harmful if swallowed or if inhaled |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |

HMIS Rating
Health hazard: 2
Chronic Health Hazard: 1
Flammability: 1
Physical Hazard: 0

NFPA Rating
Health hazard: 2
Fire Hazard: 1
Reactivity Hazard: 0

DISCLAIMER OF RESPONSIBILITY
The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

Revision Date 11/25/2014