SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Chemical Name Poly(oxy-1,2-ethanediyl), α-(nonylphenyl)-ω-hydroxy-, phosphate, ammonium salt
Trade name NAXONAC® 965A
CAS No. 68511-21-7

Relevant identified uses of the substance or mixture and uses advised against
Identified use(s) Emulsion Polymerizations
Uses advised against None

Details of the supplier of the safety data sheet
Company Identification Nease Co. LLC
10740 Paddys Run Road
Harrison, OH 45030

Telephone (513) 738-1255
Telephone (Product Information) (888) 762-7373
Fax (513) 587-2828
E-Mail (competent person) techservice@neaseco.com

Emergency telephone number
Emergency Phone No. (513) 738-1255
CHEMTREC 24 hr. (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture
OSHA HCS (29 CFR 1910.1200) Skin Irrit. 2; Eye Irrit. 2b

Label elements
Hazard Symbol

Signal word(s) WARNING

Hazard statement(s)
Causes skin irritation.
Causes eye irritation.

Precautionary statement(s)
Wear eye/face protection. Wash hands and exposed skin after use.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Other hazards Not classified as PBT or vPvB.

Additional Information Warning - this preparation contains a substance not yet tested completely.
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>Hazard statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenoxypoly(ethyleneoxy)ethyl ester of phosphoric acid, ammonium salt</td>
<td>25 – 27%</td>
<td>68511-21-7</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>Aqua ammonia</td>
<td>&lt;1.3%</td>
<td>1336-21-6</td>
<td>Causes severe skin burns and eye damage. Harmful if swallowed. Very toxic to aquatic life.</td>
</tr>
<tr>
<td>Water</td>
<td>73 – 75%</td>
<td>7732-18-5</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

**Additional Information** - Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below.

- Ethylene Oxide (CAS No. 75-21-8) - May accumulate in the head space of drums.

SECTION 4: FIRST AID MEASURES

**Description of first aid measures**

**Inhalation**  
Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is laboured, administer oxygen. If breathing has stopped, apply artificial respiration.

**Skin Contact**  
Wash affected skin with plenty of water. Continue to wash the affected area for at least 15 minutes. If symptoms occur obtain medical attention.

**Eye Contact**  
Immediately flush eyes for at least 15 minutes. Hold eye open and rinse slowly and gently with water. Continue rinsing. Seek medical treatment when anyone has symptoms apparently due to contact with eyes.

**Ingestion**  
Drink two glasses of water. Call a physician. If swallowed, and the victim is conscious and alert, induce vomiting immediately, as directed by medical personnel.

**Most important symptoms and effects, both acute and delayed**

None

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

None

SECTION 5: FIRE-FIGHTING MEASURES

**Extinguishing media**

-Suitable Extinguishing Media  
Non-combustible. As appropriate for surrounding fire.

-Unsuitable Extinguishing Media  
None anticipated.

**Special hazards arising from the substance or mixture**

None anticipated.

**Advice for fire-fighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Put on protective equipment before entering danger area.

**Environmental precautions**

Do not allow to enter drains, sewers or watercourses.
Methods and material for containment and cleaning up

- Contain spillages with sand, earth or any suitable adsorbent material.
- Transfer to a container for disposal or recovery. Wash the spillage area with water. If possible prevent water running into sewers.

Reference to other sections

- None

Additional Information

- None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

- Avoid contact with skin and eyes. This product may contain trace levels of Ethylene oxide (CAS No. 75-21-8), which may accumulate in the headspace of containers. Establish monitoring systems for exposure assessment to comply with OSHA standard 29 CFR 1910.1047.

Conditions for safe storage, including any incompatibilities

- Storage Temperature: Above 20° C (68° F). Prevent from freezing.
- Incompatible materials: Keep away from oxidising agents. Keep container tightly closed and dry.

Specific end use(s)

- Emulsion Polymerizations

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>CAS No.</th>
<th>(8hr TWA)</th>
<th>(STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PEL (OSHA)</td>
<td>TLV (ACGIH)</td>
</tr>
<tr>
<td>Ammonia</td>
<td>-----</td>
<td>50 ppm</td>
<td>25 ppm</td>
</tr>
<tr>
<td>Ethylene Oxide*</td>
<td>75-21-8</td>
<td>1 ppm</td>
<td>1 ppm</td>
</tr>
</tbody>
</table>

* May accumulate in the headspace of drums. OSHA Action Level = 0.5 ppm as an 8-hour time-weighted average. Refer to OSHA 29 CFR 1910.1047.

Recommended monitoring method

- Electrochemical sensor; NIOSH 1614 (Ethylene Oxide)

Exposure controls

- Appropriate engineering controls: Not normally required.

Personal protection equipment

- Eye/face protection: Wear protective eye glasses for protection against liquid splashes.
- Skin protection (Hand protection/ Other): The following to be used as necessary: Gloves (Neoprene or Natural rubber).
- Respiratory protection: No personal respiratory protective equipment normally required.
- Thermal hazards: Use gloves with insulation for thermal protection, when needed.
- Environmental Exposure Controls: Do not allow to enter drains, sewers or watercourses.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Yellow / Pale brown</td>
</tr>
<tr>
<td>Odour</td>
<td>Ammonia</td>
</tr>
<tr>
<td>Odour Threshold (ppm)</td>
<td>Not available</td>
</tr>
<tr>
<td>pH (Value)</td>
<td>7 – 8.5</td>
</tr>
<tr>
<td>Melting Point (°C) / Freezing Point (°C)</td>
<td>0° C (Water)</td>
</tr>
<tr>
<td>Boiling point/boiling range (°C):</td>
<td>100° C (Water)</td>
</tr>
<tr>
<td>Flash Point (°C)</td>
<td>&gt; 250° C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit ranges</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour Pressure (Pascal)</td>
<td>2266 (Water)</td>
</tr>
<tr>
<td>Vapour Density (Air=1)</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Density (g/ml)</td>
<td>1.01 at 25° C</td>
</tr>
<tr>
<td>Solubility (Water)</td>
<td>Soluble</td>
</tr>
<tr>
<td>Solubility (Other)</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition Coefficient (n-Octanol/water)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto Ignition Temperature (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Kinematic Viscosity (cSt) @ 40°C</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not oxidising.</td>
</tr>
<tr>
<td>Other information</td>
<td>Not available</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

Reactivity                           Stable under normal conditions.
Chemical stability                    Stable.
Possibility of hazardous reactions    None anticipated.
Conditions to avoid                   Incompatible materials.
Incompatible materials                Reacts with oxidizers.
Hazardous Decomposition Product(s)    Carbon monoxide, Carbon dioxide, Nitrogen oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Substances in preparations / mixtures

Ammonia aqueous solution (CAS No. 1336-21-6):

| Acute toxicity                        | Oral: LD50 = 350 mg/kg (rat) |
| Irritation/Corrosivity                | Corrosive                    |
| Sensitization                        | No data.                     |
| Repeated dose toxicity                | No data                       |
| Carcinogenicity                       | No data                       |

<table>
<thead>
<tr>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>NIOSH</th>
</tr>
</thead>
</table>

Mutagenicity                                | There is no evidence of mutagenic potential. |
Toxicity for reproduction                    | No information available                     |

This product may contain trace levels of Ethylene oxide (CAS No. 75-21-8), which may accumulate in the head space of containers. Establish monitoring systems for exposure assessment to comply with OSHA standard 29 CFR 1910.1047. Ethylene oxide is a known human carcinogen by NTP and a suspected human carcinogen by ACGIH®.
SECTION 12: ECOLOGICAL INFORMATION

Toxicity - Substances in preparations / mixtures

Ammonia aqueous solution (CAS No. 1336-21-6)

Short term
- LC50 = 0.024 – 0.093 mg/l (48 hour) (L. macrochirus) (Bluegill sunfish)
- LC50 = 0.974 – 1.97 mg/l (1 week(s)) (I. punctatus) (Channel catfish)
- LC50 = 5 – 8 mg/l (24 hour(s))
- LC50 = 0.66 mg/l (48 hour) (Daphnia magna)

Long Term
No data.

Persistence and degradability
Not readily biodegradable.

Bioaccumulative potential
No data.

Mobility in soil
No data.

Results of PBT and vPvB assessment
Not classified as PBT or vPvB.

Other adverse effects
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Disposal should be in accordance with local, state or national legislation.
Consult an accredited waste disposal contractor or the local authority for advice.

Additional Information
None known.

SECTION 14: TRANSPORT INFORMATION

UN number
Not classified as dangerous for transport

Proper Shipping Name
Transport hazard class(es)
Packing group
Hazard label(s)
Environmental hazards
Special precautions for user

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.
Canada Domestic Substance List (DSL) - Listed

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>RQ (Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide</td>
<td>1336-21-6</td>
<td>&lt;1.3</td>
<td>1000</td>
</tr>
</tbody>
</table>

SARA 311/312 - Hazard Categories:
- ☐ Fire
- ☐ Sudden Release
- ☐ Reactivity
- ☑ Immediate (acute)
- ☐ Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Hydroxide</td>
<td>1336-21-6</td>
<td>&lt;1.3</td>
</tr>
</tbody>
</table>

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>------</td>
<td>----</td>
</tr>
</tbody>
</table>
SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: October 17, 2014

Additional Information:

HMIS (Hazardous Material Information System)  NFPA (National Fire Protection Association)

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