1. Product and Company Identification

Product identifier | Pool Perfect Plus Phosfree
--- | ---
Other means of identification | Not available
Recommended use | Water cleaning compound
Recommended restrictions | None known.
Manufacturer information | NC Brands
 | 40 Richards Ave.
 | Norwalk, CT 06854 US
 | Phone: (800) 753-1233
 | Emergency Phone: CHEMTREC (800) 424-9300
Supplier | See above.

2. Hazards Identification

Physical hazards | Not classified.
Health hazards | Serious eye damage/eye irritation Category 2A
Environmental hazards | Not classified
WHMIS 2015 defined hazards | Not classified
Label elements

Signal word | Warning
Hazard statement | Causes serious eye irritation.
Precautionary statement
Prevention | Wash thoroughly after handling. Wear eye protection/face protection.
Response | 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.
Storage | Store away from incompatible materials.
Disposal | Dispose of waste and residues in accordance with local authority requirements.
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) | None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) | None known
Hazard(s) not otherwise classified (HNOC) | None known.
Supplemental information | Not applicable.

3. Composition/Information on Ingredients

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lanthanum Chloride (LaCl3), Hydrate</td>
<td>20211-76-1</td>
<td>2.73</td>
<td></td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>68439-46-3</td>
<td>1.58</td>
<td></td>
</tr>
</tbody>
</table>

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

Inhalation | If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact | Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Eye contact | 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.
Rinse mouth. Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Most important symptoms/effects, acute and delayed

Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Avoid contact with eyes and skin. Wear rubber gloves and safety glasses with side shields.

---

### 5. Fire Fighting Measures

**Suitable extinguishing media**

- Water fog
- Foam
- Dry chemical powder
- Carbon dioxide

**Unsuitable extinguishing media**

- Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**

- During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

- Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
- Move containers from fire area if you can do so without risk.
- Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

- No unusual fire or explosion hazards noted.

**Hazardous combustion products**

- May include and are not limited to: Oxides of sulfur. Oxides of carbon. Hydrogen chloride.

---

### 6. Accidental Release Measures

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

- Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

- Stop the flow of material, if this is without risk.
- Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.
- Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
- Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

- Avoid discharge into drains, water courses or onto the ground.

---

### 7. Handling and Storage

**Precautions for safe handling**

- Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. Avoid contact with eyes, skin and clothing.

**Conditions for safe storage, including any incompatibilities**

- Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

---

### 8. Exposure Controls/Personal Protection

**Occupational exposure limits**

- No exposure limits noted for ingredient(s).

**Biological limit values**

- No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

- Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

- **Eye/face protection**
  - Wear safety glasses with side shields (or goggles).

- **Skin protection**
  - Impervious gloves. Confirm with reputable supplier first.
As required by employer code.

Other

Respiratory protection
Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA’s respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI’s standard for respiratory protection (Z88.2).

Thermal hazards
General hygiene considerations
Not applicable.

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Cloudy</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Amber</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>2.1 - 2.3</td>
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<tr>
<td>Melting point/freezing point</td>
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</tr>
<tr>
<td>Initial boiling point and boiling range</td>
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</tr>
<tr>
<td>Pour point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1 - 1.1</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not available.</td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
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</tr>
<tr>
<td>Flammability limit - lower (%)</td>
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</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
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</tr>
<tr>
<td>Vapor density</td>
<td>Not available.</td>
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<tr>
<td>Relative density</td>
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<td>Solubility(ies)</td>
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<tr>
<td>Auto-ignition temperature</td>
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</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Reactivity
This product may react with strong alkalies.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Chemical stability
Material is stable under normal conditions.

Conditions to avoid
Do not mix with other chemicals.

Incompatible materials
Strong oxidizing agents. Alkaline materials.

Hazardous decomposition products
May include and are not limited to: Oxides of sulphur. Oxides of carbon. Hydrogen chloride.

11. Toxicological Information

Routes of exposure
Eye, Skin contact, Inhalation, Ingestion.

Information on likely routes of exposure

Ingestion
May cause stomach distress, nausea or vomiting.
Inhalation  
No adverse effects due to inhalation are expected.

Skin contact  
No adverse effects due to skin contact are expected.

Eye contact  
Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics  
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects

### Acute toxicity

**Components**  
Alcohols, C9-11, ethoxylated (CAS 68439-46-3)

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dermal</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 2000 mg/kg, 24 Hours, ECHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2216 mg/kg, 24 Hours, ECHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000 mg/kg, 24 Hours, ECHA</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>&gt; 5000 mg/kg, HMIRA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 2000 mg/kg, 24 Hours, ECHA</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Rat</td>
<td>&gt; 1600 mg/m³, 4 Hours, ECHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 100 mg/m³, 6 hours, ECHA</td>
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<tr>
<td></td>
<td></td>
<td>&gt; 20 mg/L, 1 hours, Shell</td>
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<tr>
<td></td>
<td></td>
<td>&gt; 1.6 mg/L, 4 Hours, ECHA</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 5050 mg/kg, ECHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5130 mg/kg, ECHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4600 mg/kg, ECHA</td>
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<tr>
<td></td>
<td></td>
<td>3488 mg/kg, ECHA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1400 mg/kg, Air products</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1378 mg/kg, SAX</td>
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</table>

Lanthanum Chloride (lacl3), Hydrate (CAS 20211-76-1)

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
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</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>4184 mg/kg, Sigma Aldrich</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation  
Prolonged skin contact may cause temporary irritation.

- **Exposure minutes**: Not available.
- **Erythema value**: Not available.
- **Oedema value**: Not available.

Serious eye damage/eye irritation  
Causes serious eye irritation.

- **Corneal opacity value**: Not available.
- **Iris lesion value**: Not available.
- **Conjunctival reddening value**: Not available.
- **Conjunctival oedema value**: Not available.
- **Recover days**: Not available.

Respiratory or skin sensitization  
Not classified.

- **Respiratory sensitization**: Not classified.
- **Skin sensitization**: This product is not expected to cause skin sensitization.
Mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Canada - Manitoba OELs: carcinogenicity
SUCROSE (CAS 57-50-1) Not classifiable as a human carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Teratogenicity
Not classified.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not classified.

Chronic effects
Not classified.

12. Ecological Information

Ecotoxicity
See below

Ecotoxicological data
Species Test Results
Components
Alcohols, C9-11, ethoxylated (CAS 68439-46-3)
Fish Rainbow Trout 70.7 mg/L, 96 Hours
Aquatic Crustacea EC50 Water flea (Daphnia magna) 2.9 - 8.5 mg/L, 48 hours
Fish LC50 Fathead minnow (Pimephales promelas) 6 - 12 mg/L, 96 hours

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Mobility in general
Not available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification
In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.

U.S. Department of Transportation (DOT)
Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)
Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations
This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Export Control List (CEPA 1999, Schedule 3)
Not listed.
Greenhouse Gases
Not listed.

Precursor Control Regulations
Not regulated.

WHMIS 2015 Exemptions
Not applicable

US federal regulations
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Diethylene glycol monoethyl ether (CAS 111-90-0) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
No

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Diethylene glycol monoethyl ether (CAS 111-90-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Clean Water Act (CWA)
Section 112(r) (40 CFR 68.130)

US state regulations

Diethylene glycol monoethyl ether (CAS 111-90-0)

US - Louisiana Spill Reporting: Listed substance
Diethylene glycol monoethyl ether (CAS 111-90-0) Listed.

US - Minnesota Haz Subs: Listed substance
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1) Listed.
Diethylene glycol monoethyl ether (CAS 111-90-0) Listed.

US - New Jersey RTK - Substances: Listed substance
Diethylene glycol monoethyl ether (CAS 111-90-0)

US - Texas Effects Screening Levels: Listed substance
Alcohols, C9-11, ethoxylated (CAS 68439-46-3) Listed.
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1) Listed.
Diethylene glycol monoethyl ether (CAS 111-90-0) Listed.

US. Massachusetts RTK - Substance List
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)

US. New Jersey Worker and Community Right-to-Know Act
Diethylene glycol monoethyl ether (CAS 111-90-0)

US. Pennsylvania Worker and Community Right-to-Know Law
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)
Diethylene glycol monoethyl ether (CAS 111-90-0)

US. Rhode Island RTK
alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.
Inventory status

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Legend

<table>
<thead>
<tr>
<th></th>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
<th>PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>Minimal</td>
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</tr>
</tbody>
</table>

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date       03-August-2017
Version #        01
Effective date   03-August-2017
Prepared by      Dell Tech Laboratories, Ltd.   Phone: (519) 858-5021
Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.