1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PF4 Emerald
GENERAL USE: Floor cleaner
PRODUCT DESCRIPTION: Optically Enhanced Neutral Floor Cleaner
PRODUCT CODE: PF4
CHEMICAL FAMILY: Detergent blend

MANUFACTURER
MISCO Products Corporation
1048 Stinson Drive
Reading, PA 19605
Emergency Phone: 610-926-4106
Customer Service: 800-548-4568
Transportation: 800-548-4568

24 HR. EMERGENCY TELEPHONE NUMBERS
CHEM-TEL (Medical and Transportation): 800-255-3924
POISON CONTROL CENTER (Medical): 800-222-1222

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS
Health:
Skin Irritation, Category 2
Eye Corrosion, Category 1
Acute Toxicity (Oral), Category 4

GHS LABEL
Corrosion Exclamation mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS
H318: Causes serious eye damage.
H315: Causes skin irritation.
H302: Harmful if swallowed.

PRECAUTIONARY STATEMENT(S)

Prevention:
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P264: Wash thoroughly after handling.
P270: Do no eat, drink or smoke when using this product.
P234: Keep only in original container.

Response:
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P362: Take off contaminated clothing and wash before reuse.
P332+P313: If skin irritation occurs: Get medical advice/attention.
Emergency Overview

Physical Appearance: Green liquid

Immediate Concerns: Severe eye irritant and may cause permanent eye damage. Skin irritant.

Potential Health Effects

eyes: Corrosive, contact causes severe eye burns.
skin: Contact may cause moderate to severe irritation.

Ingestion: Harmful if swallowed.

Inhalation: Mist is irritating to nose, throat and lungs.

Reproductive Toxicity

Teratogenic Effects: None known.

Carcinogenicity: None known.

Mutagenicity: None known.

Routes of Entry: Eye, skin, ingestion.

Warning Caution Labels: Corrosive

Physical Hazards: None Expected.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>10 - 15</td>
<td>9016-45-9</td>
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<tr>
<td>C8-C10 ethoxylated, propoxylated alcohols</td>
<td>0 - 5</td>
<td>68603-25-8</td>
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<tr>
<td>Sodium Xylene Sulfonate</td>
<td>0 - 5</td>
<td>1300-72-7</td>
</tr>
<tr>
<td>Sodium Carbonate</td>
<td>0 - 5</td>
<td>497-19-8</td>
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<td>Fragrance</td>
<td>0 - 1</td>
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<td>Dye</td>
<td>&lt; 0.1</td>
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<tr>
<td>Water</td>
<td>70 - 80</td>
<td>7732-18-5</td>
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</tbody>
</table>

4. First Aid Measures

eyes: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

Skin: Remove contaminated clothing. Immediately flush with water followed by washing with mild soap. Seek medical attention.

Ingestion: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

Inhalation: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

Signs and Symptoms of Overexposure

eyes: Severe burning sensation, damage marked by burns.

Skin: Burning sensation, redness.

Ingestion: Irritation of mouth, throat, along with stomach upset, vomiting.

Inhalation: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

Acute Toxicity: Corrosive to eyes. Causes moderate to severe skin irritation. Harmful if swallowed.
NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: None
EXTINGUISHING MEDIA: Use an extinguishing agent suitable for the surrounding fire.
EXPLOSION HAZARDS: Fire exposed containers may burst due to increased pressure from heat.
FIRE FIGHTING PROCEDURES: Keep fire exposed containers cool with water stream or mist.
FIRE FIGHTING EQUIPMENT: Not Established
HAZARDOUS DECOMPOSITION PRODUCTS: Not Established

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.
LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.
ENVIRONMENTAL PRECAUTIONS
   WATER SPILL: Avoid discharges into open waterways.
   LAND SPILL: Avoid discharge to soil.
   AIR SPILL: NA = Not Applicable
GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.
SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Close container after use.
HANDLING: Avoid contact with skin and eyes. Wash hands before eating, drinking, smoking or using toilet facilities.
STORAGE: Store in closed container in an area inaccessible to children.
STORAGE TEMPERATURE: Store at ambient temperatures.
STORAGE PRESSURE: Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: No special requirements.
PERSONAL PROTECTIVE EQUIPMENT
   EYES AND FACE: Chemical splash googles and full face-shield.
   SKIN: Rubber or other chemical resistant gloves.
   RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.
   PROTECTIVE CLOTHING: Chemical resistant outerwear (tyvek) if contact with spray or mist is anticipated.
WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
ODOR: Clean & Fresh
ODOR THRESHOLD: Not Established
COLOR: Green
pH: 8.0 to 9.0
PERCENT VOLATILE: >85
FLASH POINT AND METHOD: None
FLAMMABLE LIMITS: N/A
AUTOIGNITION TEMPERATURE: NA = Not Applicable
VAPOR PRESSURE: \( \sim 20 \text{ mm Hg at (68°F)} \)
VAPOR DENSITY: \( \sim 1 \text{ Air = 1} \)
BOILING POINT: 212°F; 100°C
FREEZING POINT: 32°F; 0°C
THERMAL DECOMPOSITION: Not Available
SOLUBILITY IN WATER: Complete
EVAPORATION RATE: (Water =1) 1.0
DENSITY: 8.52
SPECIFIC GRAVITY: \( \sim 1.021 \text{ grams/ml.} \)
VISCOSITY: Slightly viscous.
(VOC): None

10. STABILITY AND REACTIVITY

REACTIVITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: None known.
HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
INCOMPATIBLE MATERIALS: Strong acids, oxidizers.

11. TOXICOLOGICAL INFORMATION

**ACUTE**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD&lt;sub&gt;50&lt;/sub&gt; (rat)</th>
<th>DERMAL LD&lt;sub&gt;50&lt;/sub&gt; (rabbit)</th>
<th>INHALATION LC&lt;sub&gt;50&lt;/sub&gt; (rat)</th>
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</thead>
<tbody>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>16000 mg/kg (rat)</td>
<td>4490 mg/kg (rabbit)</td>
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<tr>
<td>C8-C10 ethoxylated, propoxylated alcohols</td>
<td>447 to 847 mg/kg (rat)</td>
<td>~ 4000 mg/kg (rabbit)</td>
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<td>Sodium Carbonate</td>
<td>~ 4090 mg/kg (rat)</td>
<td>N/A</td>
<td>~ 5750 mg/l</td>
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</table>

EYES: Not Established
DERMAL LD<sub>50</sub>: Not Established
ORAL LD<sub>50</sub>: Not Established
INHALATION LC<sub>50</sub>: Not Established

EYE EFFECTS: Corrosive to eyes. Permanent damage may occur.
SKIN EFFECTS: Corrosive to skin.
CARCINOGENICITY
IARC: No listed substance

IRRITATION: Irritant
CORROSIVITY: Corrosive
GENETIC EFFECTS: No known significant effects or critical hazards.
REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.
TARGET ORGANS: No known significant effects or critical hazards.
12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established

ECOTOXICOLOGICAL INFORMATION: This material may be toxic to aquatic life.

AQUATIC TOXICITY (ACUTE): Not Established

CHEMICAL FATE INFORMATION: This product is biodegradable.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If discarded, this material and its containers should be treated as hazardous waste based on the characteristics of corrosivity as defined under federal RCRA regulations (40 CFR 261). Consult local authorities for disposal into public sewer.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: Any method in accordance with local, state, and federal laws. Best method is to recycle or reuse for intended purpose.

EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Hazmat - Limited Quantity

PLACARDS: No special requirements.

LABEL: Limited Quantity

OTHER SHIPPING INFORMATION: Certain shipping modes and packaging sizes may have exceptions from the transport regulations. The classifications/information provided above may not reflect applicable exceptions. Contact the manufacturer for more specific information on the proper shipping of this material.

AIR (ICAO/IATA)

SHIPPING NAME: Contact manufacturer for more information.

VESSEL (IMO/IMDG)

SHIPPING NAME: Contact manufacturer for more information.

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health - Acute

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: No

313 REPORTABLE INGREDIENTS: No listed substance

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)
CERCLA REGULATORY: Not Established

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

<table>
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<tr>
<th>Chemical Name</th>
<th>Requirements</th>
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<tbody>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>Massachusetts Right to Know Substance</td>
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<td>New Jersey Right To Know Substance</td>
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<td>Pennsylvania Right to Know Substance</td>
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<td>Sodium Carbonate</td>
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<td>New Jersey Right To Know Substance</td>
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</tbody>
</table>

CALIFORNIA PROPOSITION 65: No listed substance

CARCINOGEN: No listed substance

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department  Date Prepared: 2/2/2015

HMIS RATING

<table>
<thead>
<tr>
<th></th>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
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<th>PERSONAL PROTECTION</th>
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NFPA CODES

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