SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Formula-D
GENERAL USE: Ready to use all purpose cleaner
PRODUCT DESCRIPTION: All Purpose Spray Cleaner
PRODUCT CODE: 147FORMULAD
CHEMICAL FAMILY: Solvent/detergent blend

DISTRIBUTOR
Noble Chemical Inc.
2205 Old Philadelphia Pike
Lancaster, PA 17602
Customer Service: 1-888-256-6400

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 3
Eye Irritation, Category 2B

GHS LABEL
SIGNAL WORD: WARNING
HAZARD STATEMENTS
H320: Causes eye irritation.
H316: Causes mild skin irritation.
H303: May be harmful if swallowed.

PRECAUTIONARY STATEMENT(S)
Prevention:
P264: Wash hands thoroughly after handling.
P234: Keep only in original packaging.

Response:
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P362: Take off contaminated clothing.

Storage:
P405: Store locked up.

Disposal:
P501: Dispose of contents/container in accordance with all local, state and federal regulations.

EMERGENCY OVERVIEW
PHYSICAL APPEARANCE: Green liquid
IMMEDIATE CONCERNS: Moderate eye irritant.

POTENTIAL HEALTH EFFECTS
**EYES:** Contact causes eye irritation.
**SKIN:** May be mildly irritating with prolonged or repeated contact.
**SKIN ABSORPTION:** No known significant effects or critical hazards.
**INGESTION:** Harmful if swallowed.
**REPRODUCTIVE TOXICITY**
  **TERATOGENIC EFFECTS:** No known significant effects or critical hazards.
  **CARCINOGENICITY:** No known significant effects or critical hazards.
  **MUTAGENICITY:** No known significant effects or critical hazards.
**ROUTES OF ENTRY:** Eye, skin, ingestion.
**WARNING CAUTION LABELS:** Irritant
**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>0 - 1</td>
<td>9016-45-9</td>
</tr>
<tr>
<td>Propylene Glycol n-butyl Ether</td>
<td>0 - 5</td>
<td>5131-66-8</td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>0 - 3</td>
<td>141-43-5</td>
</tr>
<tr>
<td>Dye</td>
<td>&lt; 0.1</td>
<td>N/A</td>
</tr>
<tr>
<td>Fragrance</td>
<td>&lt; 1</td>
<td>N/A</td>
</tr>
<tr>
<td>Water</td>
<td>90 - 95</td>
<td>7732-18-5</td>
</tr>
</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:** Burning sensation with tears, redness.
  **SKIN:** Redness and itching sensation.
  **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:** Irritating to eyes, mild skin irritation.

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE CLASS:** None
**EXTINGUISHING MEDIA:** Not required.
**EXPLOSION HAZARDS:** None
**HAZARDOUS DECOMPOSITION PRODUCTS:** Decomposition products may include: Carbon dioxide, Carbon monoxide, nitrogen oxides.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Avoid walking in product. Wipe up or otherwise flush small spills to sanitary sewer.
**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.

RELEASE NOTES: Not Established

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

EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXPOSURE LIMITS</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL</td>
</tr>
<tr>
<td></td>
<td>ppm</td>
</tr>
<tr>
<td>Propylene Glycol n-butyl Ether</td>
<td>TWA</td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>TWA</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
</tr>
</tbody>
</table>

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields.

SKIN: Rubber or other chemical resistant gloves.

RESPIRATORY: Where danger of mist contact may occur, wear NIOSH approved respiratory protection for mists.

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: Citrus

ODOR THRESHOLD: Not Established

COLOR: Green

pH: 11.0 to 12.0

PERCENT VOLATILE: >98

FLASH POINT AND METHOD: None

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: NA = Not Applicable

VAPOR PRESSURE: ~ 20 mm Hg at (68°F)

VAPOR DENSITY: ~ 1 Air = 1

BOILING POINT: 212° F; 100° C
FREEZING POINT: 32°F; 0°C
SOLUBILITY IN WATER: Complete
EVAPORATION RATE: (Water = 1) 1.0
DENSITY: 8.35 at (20°F)
SPECIFIC GRAVITY: 1.001 grams/ml. at (20°F)
VISCOSITY: Water thin.
(VOC): 2.360 % by weight

10. STABILITY AND REACTIVITY

REACTIVITY: None
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Not Established
HAZARDOUS DECOMPOSITION PRODUCTS: None Expected.
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>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol Ethoxylate</td>
<td>16000 mg/kg (rat)</td>
<td>4490 mg/kg (rabbit)</td>
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</tr>
<tr>
<td>Propylene Glycol n-butyl Ether</td>
<td>2124 to 2700 mg/kg (rat)</td>
<td>&gt; 2000 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>1089 mg/kg (rat)</td>
<td>2504 mg/kg (rabbit)</td>
<td>~ 1.48 mg/l</td>
</tr>
</tbody>
</table>

EYES: Causes eye irritation.
DERMAL LD<sub>50</sub>: > 2000 Not Established
ORAL LD<sub>50</sub>: > 5000 Not Established
INHALATION LC<sub>50</sub>: Not Established
EYE EFFECTS: Mild to moderate eye irritant.
SKIN EFFECTS: Moderate skin irritant.
CARCINOGENICITY
IARC: No listed substance
CORROSIVITY: NA = Not Applicable
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.
MUTAGENICITY: 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: Although not a hazardous waste, the discarding or disposal of this material should be done at a properly permitted facility in accordance with the regulations 40CFR 262, 263, 264, and 268. Additionally, the discarding or disposal of this material may be further regulated by state, regional, or local regulations.

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

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: Not regulated.

PLACARDS: None

LABEL: None

U.S. CUSTOMS HARMONIZATION NUMBER: 3402.90.10.00

AIR (ICAO/ATA)

SHIPPING NAME: Not regulated.

VESEL (IMO/IMDG)

SHIPPING NAME: Not regulated.

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

TSCA (TOXIC SUBSTANCE CONTROL ACT)

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

STATES WITH SPECIAL REQUIREMENTS

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

CALIFORNIA PROPOSITION 65: No listed substance

CARCINOGEN: No listed substance

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department  Date Prepared: 04/22/2015
MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.