1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier
Product Description: Symmetry NXG

Other means of identification
Product code 12P-0011
Registration number(s) 70506-249

Recommended use of the chemical and restrictions on use
Recommended use Algaecide.
Uses advised against Activities contrary to label recommendation

Details of the Supplier of the Safety Data Sheet
Supplier Address
UPL NA Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number
Company Phone Number 1-800-438-6071
Emergency telephone number Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison Control Center (866) 673-6671 (24hrs)

2. Hazards Identification

Classification
OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Vapors)</td>
<td>Category 2</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements
HARMFUL IF SWALLOWED
Fatal if inhaled
CAUSES SKIN IRRITATION
Causes serious eye irritation
May cause an allergic skin reaction
Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
In case of inadequate ventilation wear respiratory protection
Wear protective gloves/protective clothing/eye protection/face protection
Contaminated work clothing should not be allowed out of the workplace

IF IN EYES: Rinse continuously 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
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
Call a POISON CENTER or doctor if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)
OTHER INFORMATION
• Harmful to aquatic life with long lasting effects
• Harmful to aquatic life
• May be harmful in contact with skin

3. Composition/information on Ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper triethanolamine complex</td>
<td>82027-59-6</td>
<td>26.49</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>1336-21-6</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures

FIRST AID MEASURES

Eye contact
Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact
Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water for at least 15 minutes. Call a poison control center or doctor for treatment advice.

Inhalation
Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion
Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Protection of First-aiders
Use personal protective equipment.

**Most Important Symptoms and Effects, Both Acute and Delayed**

**Most Important Symptoms and Effects**
no data available.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

Notes to physician
Treat symptomatically.

**5. Fire-fighting measures**

**Suitable extinguishing media**
Carbon dioxide (CO2), Aquatic. Foam.

**Unsuitable extinguishing media**
no data available.

**Specific hazards arising from the chemical**
Thermal decomposition can lead to release of irritating gases and vapours.

**Hazardous combustion products**
decomposes at 200 C.

**Explosion data**

**Protective equipment and precautions for firefighters**
Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. Accidental release measures**

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

**Personal Precautions**
Provide adequate ventilation. Avoid contact with skin and eyes. Wear protective gloves/protective clothing and eye/face protection. Wash thoroughly after handling.

**Environmental Precautions**
Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

**Methods and material for containment and cleaning up**

**Methods for Clean-Up**
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

**7. Handling and Storage**

**Precautions for safe handling**

**Handling**
Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Keep out of reach of children. Wash thoroughly after handling.
Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children.

incompatible materials
Strong oxidizing agents.

8. Exposure Controls/Personal Protection

Exposure guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls
Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment

Eye/Face Protection
Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.

Skin protection
Wear protective gloves/clothing. Chemical resistant footwear plus socks.

Respiratory protection
Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134.

General hygiene considerations
Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>VALUES</th>
<th>Remarks/ • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>10 °C / 50 ºF</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability limit in air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.19 g/mL</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility in Other Solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
Dynamic viscosity  No information available
Explosive properties No information available
Oxidizing properties No information available

OTHER INFORMATION
Softening point  No information available
molecular weight No information available
VOC Content No information available
Liquid Density No information available

10. Stability and Reactivity

Reactivity
no data available

Chemical stability
Stable under normal conditions.

Possibility of hazardous reactions
None under normal processing.

Hazardous polymerization  Hazardous polymerisation does not occur.

Conditions to avoid
Extremes of temperature and direct sunlight.

incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Carbon oxides.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information
Symmetry:
acute oral LD50 = 1,312 mg/kg
acute dermal LD50 = 2,918 mg/kg
acute inhalation LC50 = >1.11 mg/L (rat - 4 hour mist nose only)
eye irritation = moderately irritating
skin irritation = mild skin irritation

Inhalation  MAY BE FATAL IF INHALED.

Eye contact  Moderately irritating to the eyes.

Skin contact  Irritating to skin. May be absorbed through the skin in harmful amounts.

Ingestion  HARMFUL IF SWALLOWED.

Information on Toxicological Effects

Symptoms  No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization  No information available.
Mutagenic effects  no data available.
Carcinogenicity
The information below indicates whether any agency has listed any ingredient as a carcinogen.

Reproductive effects
Not Available.

STOT - Single Exposure
no data available.

STOT - Repeated Exposure
no data available.

Aspiration hazard
No information available.

Numerical Measures of Toxicity - Product Information

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral</td>
<td>1312 mg/kg (rat)</td>
</tr>
<tr>
<td>LD50 Dermal</td>
<td>2918 mg/kg (rat)</td>
</tr>
<tr>
<td>LC50 Inhalation</td>
<td>LC50/inhalation/4h/rat = &gt; 1.11 mg/l</td>
</tr>
</tbody>
</table>

12. Ecological Information

Ecotoxicity
Toxic to fish and aquatic invertebrates

Persistence/Degradability
no data available.

Bioaccumulation/Accumulation
Does not bioaccumulate.

Other Adverse Effects
no data available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method
Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated packaging
Refer to product label.

14. Transport Information

DOT
Particle size of the mist is not reasonably foreseeable to be encountered by a human during transport. Therefore as noted in 49 CFR 173.132(b)(3) this material is not regulated for transportation purposes

IATA
Particle size of the mist is not reasonably foreseeable to be encountered by a human during transport. Therefore as noted in IATA 3.6.3.3 this material is not regulated for transportation purposes

IMDG
Particle size of the mist is not reasonably foreseeable to be encountered by a human during transport. Therefore as noted in IMO IV 6.1 this material is not regulated for transportation purposes
15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**signal word**  
CAUTION

**Ventilation Control**  
PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

Keep out of Reach of Children. Harmful if swallowed or absorbed through the skin. Prolonged or frequent repeated skin contact may cause allergic reaction in some individuals. Toxic to fish and aquatic organisms.

**International Inventories**

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>USINV</td>
<td>Not present</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Not present</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Not Present</td>
</tr>
<tr>
<td>ENCS</td>
<td>Not Present</td>
</tr>
<tr>
<td>China</td>
<td>Not Present</td>
</tr>
<tr>
<td>KECL</td>
<td>Not Present</td>
</tr>
<tr>
<td>PICCS</td>
<td>Not Present</td>
</tr>
<tr>
<td>AICS</td>
<td>Not Present</td>
</tr>
<tr>
<td>TSCA</td>
<td>Not Present</td>
</tr>
</tbody>
</table>

**Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium hydroxide</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**CERCLA**

Not applicable

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>RQ</th>
<th>CERCLA EHS RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium hydroxide</td>
<td>1000 lb</td>
<td>RQ 1000 lb final</td>
<td>RQ 454 kg final</td>
</tr>
</tbody>
</table>

**SARA Product RQ**

0
RCRA
Pesticide Information

State Regulations

State Right-to-Know
Not applicable

International regulations
U.S. EPA Label information
EPA Pesticide registration number 70506-249

16. Other Information

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HEALTH</th>
<th>flammability</th>
<th>Instability</th>
<th>Physical hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Preparation Date 07-May-2015
Revision date 02-Jan-2019
Revision Summary Update logo Update section 1 Update Section 16***

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End of SDS