SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form : Mixture
Product name : Sparkle Glass- 3312, 3314
Product code : 80485

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet
Advantage Chemical, LLC
Temecula, CA, 92590
T 1-855-238-2436

1.4. Emergency telephone number
Emergency number : 1-800-424-9300
ChemTrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Skin Irrit. 2 H315
Eye Irrit. 2B H320
Full text of H-statements: see section 16

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US) :

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H315 - Causes skin irritation
H320 - Causes eye irritation
Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 - If on skin: Wash with plenty of water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS-US)
Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture
Sparkle Glass- 3312, 3314
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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonium hydroxide, solution, 25%&lt;=conc&lt;35%</td>
<td>(CAS No) 1336-21-6</td>
<td>0.75</td>
<td>Skin Corr. 1A, H314 Aquatic Acute 2, H401</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Allow breathing of fresh air. Allow the victim to rest.
First-aid measures after skin contact: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries after skin contact: Causes skin irritation.
Symptoms/injuries after eye contact: Causes eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
No additional information available

5.3. Advice for firefighters
Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Avoid contact with skin, eyes and clothing.
Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions**: Keep only in original container in a cool well ventilated area. Keep container closed when not in use.

**Incompatible products**: Strong bases. Strong acids.

**Incompatible materials**: Sources of ignition. Direct sunlight.

**Storage temperature**: 25 (5 - 42) °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Sparkle Glass-3312, 3314</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonium hydroxide, solution, 25%&lt;=conc&lt;35% (1336-21-6)</td>
<td>ACGIH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (ppm)</td>
<td>25 ppm</td>
</tr>
<tr>
<td>ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>25 ppm</td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

**Personal protective equipment**: Avoid all unnecessary exposure.

**Hand protection**: Wear protective gloves.

**Eye protection**: Chemical goggles or safety glasses.

**Skin and body protection**: Wear suitable protective clothing.

**Other information**: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Blue</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic odour</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>11.5 (10.5 - 12.5)</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>&lt;= 0 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt;= 100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>None</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>&gt;= 1.005 (0.995 - 1.015) g/ml</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.  Water: Solubility in water of component(s) of the mixture:  • ammonium hydroxide, solution, 25%&lt;=conc&lt;35%: Complete  • 2-propanol: Complete  • 2-(2-butoxyethoxy)ethanol: Complete</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available

9.2. Other information
VOC content: <= 30.2 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified
Skin corrosion/irritation: Causes skin irritation.
  pH: 11.5 (10.5 - 12.5)
Serious eye damage/irritation: Causes eye irritation.
  pH: 11.5 (10.5 - 12.5)
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified
Potential adverse human health effects and symptoms: Based on available data, the classification criteria are not met.
Symptoms/injuries after skin contact: Causes skin irritation.
Symptoms/injuries after eye contact: Causes eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Substance</th>
<th>LC50 fish 1</th>
<th>LC50 other aquatic organisms 1</th>
<th>LC50 fish 2</th>
<th>TLM fish 1</th>
<th>TLM fish 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.16 - 1.1 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Solution &gt;=50%)</td>
<td>1 - 10 mg/l (96 h; Solution &gt;=50%)</td>
<td>0.75 - 3.4 mg/l (96 h; Pimephales promelas; Solution &gt;=50%)</td>
<td>47 ppm (48 h; Salmo gairdneri (Oncorhynchus mykiss); Cool water)</td>
<td>34 ppm (48 h; Salmo gairdneri (Oncorhynchus mykiss); Warm water)</td>
</tr>
</tbody>
</table>
Sparkle Glass- 3312, 3314
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10/28/2015
EN (English) 5/6

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12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Sparkle Glass- 3312, 3314</th>
<th>Persistence and degradability</th>
<th>Not established.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonium hydroxide, solution, 25%&lt;=conc&lt;35% (1336-21-6)</td>
<td>Persistence and degradability</td>
<td>Readily biodegradable in water. Ozonation in water. Biodegradable in the soil. No (test)data on mobility of the components available. Ozonation in the air.</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Sparkle Glass- 3312, 3314</th>
<th>Bioaccumulative potential</th>
<th>Not established.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ammonium hydroxide, solution, 25%&lt;=conc&lt;35% (1336-21-6)</td>
<td>Log Pow</td>
<td>-1.3</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Bioaccumulation: not applicable.</td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.
Other information : Avoid release to the environment.

---

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| Waste disposal recommendations | Dispose in a safe manner in accordance with local/national regulations. |

Ecology - waste materials : Avoid release to the environment.

---

SECTION 14: Transport information

\[\text{Department of Transportation (DOT)}\]
In accordance with DOT
Not regulated for transport

Additional information
Other information : No supplementary information available.

---

ADR
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

---

SECTION 15: Regulatory information

15.1. US Federal regulations

<table>
<thead>
<tr>
<th>ammonium hydroxide, solution, 25%&lt;=conc&lt;35% (1336-21-6)</th>
<th>Listed on the United States TSCA (Toxic Substances Control Act) inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject to reporting requirements of United States SARA Section 313</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RQ (Reportable quantity, section 304 of EPA's List of Lists)</th>
<th>1000 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 313 - Emission Reporting</td>
<td>31 % Ammonia as found in Ammonium Hydroxide</td>
</tr>
</tbody>
</table>

15.2. International regulations

CANADA
No additional information available
Sparkle Glass- 3312, 3314
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EU-Regulations
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Not classified

National regulations
No additional information available

15.3. US State regulations

<table>
<thead>
<tr>
<th>ammonium hydroxide, solution, 25%&lt;=conc&lt;35% (1336-21-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - Massachusetts - Right To Know List</td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Revision date : 10/28/2015
Other information : None.

Full text of H-statements:

<table>
<thead>
<tr>
<th>Aquatic Acute 2</th>
<th>Hazardous to the aquatic environment — Acute Hazard, Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2B</td>
<td>Serious eye damage/eye irritation, Category 2B</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation, Category 1A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>H401</td>
<td>Toxic to aquatic life</td>
</tr>
</tbody>
</table>

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
NFPA specific hazard : None

HMIS III Rating
Health : 0 Minimal Hazard - No significant risk to health
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal Protection : None

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.