SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1. Product Identifier
Product Form: Substance
Product Name: Poly Ethylene Glycol
CAS No: 25322-68-3
Synonyms: PEG 200; PEG 4

1.2. Intended Use of the Product
Use of the substance/mixture: Per FDA: Coatings on Fresh Citrus Fruit; Polyethylene Glycol (mean molecular weight 200–9,500) – GMP, GRAS; Boiler water additives; Defoaming agents; Adhesives; Resinous and polymeric coatings; Components of paper and paperboard in contact with dry food; Polyethylene Glycol (mean molecular weight 200–9,500) (ZERO – in milk – 172.820, 526.820); Diluents in color additive mixtures for food use exempt from certification.

1.3. Name, Address, and Telephone of the Responsible Party
Company
Acme-Hardesty Co
450 Sentry Parkway
Blue Bell, PA 19422
T 866-226-3834   T 215-591-3610
www.acme-hardesty.com

1.4. Emergency Telephone Number
Emergency Number : 800-424-9300
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
Classification (GHS-US)
STOT SE 3 H335
Full text of H-phrases: see section 16

2.2. Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US) :

Signal Word (GHS-US) : Warning
Hazard Statements (GHS-US) : H335 - May cause respiratory irritation
Precautionary Statements (GHS-US) : P261 - Avoid breathing vapors, mist, or spray.
P271 - Use only outdoors or in a well-ventilated area.
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a poison center or doctor if you feel unwell.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards
No additional information available

2.4. Unknown Acute Toxicity (GHS-US)
No data available
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene glycol (CAS No) 25322-68-3</td>
<td>(CAS No) 25322-68-3</td>
<td>100</td>
<td>STOT SE 3, H335</td>
</tr>
</tbody>
</table>

3.2. Mixture

Not applicable

Full text of H-phrases: 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: When symptoms occur: go into open air and ventilate suspected area.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/Injuries: Irritation of respiratory tract.

Symptoms/Injuries After Inhalation: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.

Symptoms/Injuries After Skin Contact: Contact during a long period may cause slight irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause nausea, vomiting and diarrhea.

Chronic Symptoms: None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding type of fire. Carbon dioxide (CO2), dry chemical powder, Sand.

Unsuitable Extinguishing Media: Do not use water.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible.

Explosion Hazard: Product is not explosive.

Reactivity: No reactivity hazard.

5.3. Advice for Firefighters

Firefighting Instructions: Exercise caution when fighting any chemical fire.

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

General Measures: Avoid contact with the skin and the eyes.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).


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.
6.3. Methods and Material for Containment and Cleaning Up
For Containment: Absorb and/or contain spill with inert material.
Methods for Cleaning Up: Collect absorbed material and place into a sealed, labelled container for proper disposal. Clean up spills immediately and dispose of waste safely.

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
Additional Hazards When Processed: Keep away from heat, sparks, open flames, hot surfaces. – No smoking.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Protect from heat and direct sunlight.
Incompatible Products: Strong oxidizers.
Storage Temperature: > 20 °C (for bulk quantities)
Storage Area: Temperature higher than necessary degrades quality at rates dependent on time and temperature of exposure.
Special Rules on Packaging: Stainless steel preferred for storage.

7.3. Specific End Use(s)
Per FDA: Coatings on Fresh Citrus Fruit; Polyethylene Glycol (mean molecular weight 200–9,500) – GMP, GRAS; Boiler water additives; Defoaming agents; Adhesives; Resinous and polymeric coatings; Components of paper and paperboard in contact with dry food; Polyethylene Glycol (mean molecular weight 200–9,500) (ZERO – in milk – 172.820, 526.820); Diluents in color additive mixtures for food use exempt from certification.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

8.2. Exposure Controls
Appropriate Engineering Controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.
Personal Protective Equipment:
- Hand Protection: Wear chemically resistant protective gloves.
- Eye Protection: Chemical goggles or face shield.
- Skin and Body Protection: Wear suitable protective clothing.
- Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.
Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties
Physical State: Liquid
Appearance: Colorless
Odor: Characteristic
Odor Threshold: No data available
pH: 5 - 6
Relative Evaporation Rate (butylacetate=1): No data available
Melting Point: -65 °C (-85.00 °F)
Freezing Point: No data available
Boiling Point: No data available
PEG 200 NF (Poly Ethylene Glycol 200 NF)
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>&gt; 200 °C (392.00 °F)</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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</tr>
<tr>
<td>Vapor Pressure</td>
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</tr>
<tr>
<td>Relative Vapor Density at 20 °C</td>
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</tr>
<tr>
<td>Relative Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
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</tr>
<tr>
<td>Solubility</td>
<td>Water: Soluble</td>
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<tr>
<td>Partition Coefficient: N-Octanol/Water</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>4 - 4.2 cSt @ 99°C</td>
</tr>
<tr>
<td>Explosive Properties</td>
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</tr>
<tr>
<td>Oxidizing Properties</td>
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<tr>
<td>Explosive Limits</td>
<td>Not applicable</td>
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<tr>
<td>Refractive Index</td>
<td>1.452 +/- 0.002</td>
</tr>
</tbody>
</table>

9.2. Other Information  No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: No reactivity hazard.
10.2 Chemical Stability: Stable under normal temperature and pressure.
10.3 Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.4 Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.
10.5 Incompatible Materials: Strong oxidizers.
10.6 Hazardous Decomposition Products: Carbon oxides (CO, CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects
Acute Toxicity: Not classified

<table>
<thead>
<tr>
<th>Compound</th>
<th>LD50 Oral Rat</th>
<th>LD50 Dermal Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyethylene glycol (25322-68-3)</td>
<td>47000 mg/kg</td>
<td>&gt; 20 ml/kg</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation: Not classified
pH: 5 - 6

Serious Eye Damage/Irritation: Not classified
pH: 5 - 6

Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified

Poly Ethylene Glycol (25322-68-3)
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Poly Ethylene Glycol (25322-68-3)
Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/Injuries After Skin Contact: Contact during a long period may cause slight irritation.
Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion: Ingestion may cause nausea, vomiting and diarrhea.
Chronic Symptoms: None known.
PEG 200 NF (Poly Ethylene Glycol 200 NF)
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity  No additional information available
12.2. Persistence and Degradability

Poly Ethylene Glycol (25322-68-3)
Persistence and Degradability  Not established.

12.3. Bioaccumulative Potential

Poly Ethylene Glycol (25322-68-3)
Bioaccumulative Potential  Not established.

12.4. Mobility in Soil  No additional information available

12.5. Other Adverse Effects

Other Information:  Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations:  Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/IMDG/DOT

14.1. UN Number  Not regulated for transport
14.2. UN Proper Shipping Name  Not regulated for transport
14.3. Additional Information

Other information:  No supplementary information available.

Transport by Sea  Not regulated for transport
Air Transport  Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Poly Ethylene Glycol (25322-68-3)
SARA Section 311/312 Hazard Classes  Immediate (acute) health hazard

Polyethylene glycol (25322-68-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations  Neither this product nor its chemical components appear on any US state lists.

SECTION 16: OTHER INFORMATION

Revision Date:  04/02/2015
Indication of Changes:  Revision date.
Other Information:  This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H335      | May cause respiratory irritation |

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