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

Product Identifier
Product name: Econo-AF3

Intended Use Of The Product
Use of the substance/mixture: Foaming agent.

Name, Address, And Telephone Of The Responsible Party
Economy® Polymers & Chemicals
435 E. Anderson Road
77047 Houston, TX
T 713-723-8416; 1-800-231-2066

www.economypolymers.com

Emergency Telephone Number
Emergency number: CHEMTREC 1-800-424-9300 (US); 703-527-3887 (International, collect calls are accepted)

SECTION 2: HAZARDS IDENTIFICATION

Classification Of The Substance Or Mixture
GHS-US classification
Not classified

Label Elements
GHS-US labeling No labeling applicable
Other Hazards Not available
Unknown acute toxicity (GHS US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% (w/w)</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivatives, hydroxides, inner salts</td>
<td>(CAS No.) 61789-40-0</td>
<td>75</td>
<td>Not classified</td>
</tr>
<tr>
<td>Potassium formate</td>
<td>(CAS No.) 590-29-4</td>
<td>25</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description Of 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).
Inhalation: When symptoms occur: go into open air and ventilate suspected area.
Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes.
Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion: Rinse mouth. Do NOT induce vomiting.

Most Important Symptoms And Effects Both Acute and Delayed
General: Not available
Inhalation: May cause respiratory irritation.
Skin Contact: May cause mild skin irritation.
Econo-AF3
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Eye Contact:** Causes eye irritation.
**Ingestion:** Gastrointestinal irritation.
**Chronic symptoms:** Not available

**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

**Extinguishing Media**

**Suitable extinguishing media:** Carbon dioxide, dry chemical powder, alcohol foam, polymer foam, water spray, fog.
**Unsuitable extinguishing media:** None known.

**Special Hazards Arising From The Substance Or Mixture**

**Fire hazard:** Not considered flammable but may burn at high temperatures.
**Explosion hazard:** Product is not explosive
**Reactivity:** Hazardous reactions will not occur under normal conditions.

**Advice For Firefighters**

**Precautionary measures fire:** Not available
**Firefighting instructions:** Exercise caution when fighting any chemical fire.
**Protection during firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.
**Hazardous Combustion Products:** Carbon oxides (CO, CO2). Nitrogen oxides.

**Reference To Other Sections**
Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment And Emergency Procedures**

**General measures:** Handle in accordance with good industrial hygiene and safety practice.
**For Non-Emergency Personnel**
**Protective equipment:** Use appropriate personal protection equipment (PPE).
**Emergency procedures:** Evacuate unnecessary personnel.

**For Emergency Personnel**
**Protective equipment:** Equip cleanup crew with proper protection.
**Emergency procedures:** Ventilate area.

**Environmental Precautions**
Prevent entry to sewers and public waters.

**Methods And Material For Containment And Cleaning Up**
**For containment:** Absorb and/or contain spill with inert material, then place in suitable container.
**Methods for cleaning up:** Clear up spills immediately and dispose of waste safely.

**Reference To Other Sections**
See heading 8, Exposure Controls and Personal Protection.

### SECTION 7: HANDLING AND STORAGE

**Precautions For Safe Handling**

**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.

**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.
**Incompatible materials:** Strong acids. Strong bases. Strong oxidizers.

**Specific End Use(s)**
Foaming agent.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Exposure Controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal protective equipment: Gloves. Safety glasses.

Materials for protective clothing: Not available
Hand protection: Wear chemically resistant protective gloves.
Eye protection: Chemical goggles or safety glasses.
Skin and body protection: Not available
Respiratory protection: Wear approved mask.
Other information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information On Basic Physical And Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Transparent</td>
</tr>
<tr>
<td>Odour</td>
<td>Organic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>9 (6 - 9)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>&lt; -20 °C (-4 °F)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100 °C (212 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100 °C (212 °F)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower flammable limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper flammable limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>~ 20 mm Hg</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.03 - 1.06</td>
</tr>
<tr>
<td>Specific gravity density</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>Not available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosion data - sensitivity to mechanical impact</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosion data - sensitivity to static discharge</td>
<td>Not available</td>
</tr>
</tbody>
</table>
**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity** Hazardous reactions will not occur under normal conditions.

**Chemical Stability** Stable at standard temperature and pressure.

**Possibility Of Hazardous Reactions** Hazardous polymerization will not occur.

**Conditions To Avoid** Direct sunlight. Extremely high or low temperatures.

**Incompatible Materials** Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products** Carbon oxides (CO, CO₂). Nitrogen oxides.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Information On Toxicological Effects - Product**

**Acute toxicity** Not classified

LD₅₀ and LC₅₀ Data Not available

Skin corrosion/irritation: Not classified pH: 6 - 9

Serious eye damage/irritation: Not classified pH: 6 - 9

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: Not classified

Specific target organ toxicity (repeated exposure): Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified

Aspiration hazard: Not classified

Symptoms/injuries after inhalation: May cause respiratory irritation.

Symptoms/injuries after skin contact: May cause mild skin irritation.

Symptoms/injuries after eye contact: Causes eye irritation.

Symptoms/injuries after ingestion: Gastrointestinal irritation.

**Information On Toxicological Effects - Ingredient(s)**

<table>
<thead>
<tr>
<th>LD₅₀ and LC₅₀ Data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivatives, hydroxides, inner salts (61789-40-0)</td>
<td></td>
</tr>
<tr>
<td>LD₅₀ oral rat</td>
<td>4900 mg/kg</td>
</tr>
<tr>
<td>Potassium formate (590-29-4)</td>
<td></td>
</tr>
<tr>
<td>LD₅₀ oral rat</td>
<td>5500 mg/kg</td>
</tr>
<tr>
<td>LD₅₀ dermal rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC₅₀ inhalation rat (mg/l)</td>
<td>&gt; 0.67 mg/l/4h</td>
</tr>
</tbody>
</table>

**SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity**

<table>
<thead>
<tr>
<th>1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivatives, hydroxides, inner salts (61789-40-0)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC₅₀ fishes 1</td>
<td>1.0 - 10.0 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)</td>
</tr>
<tr>
<td>EC₅₀ Daphnia 1</td>
<td>6.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>EC₅₀ other aquatic organisms 1</td>
<td>1.0 - 10.0 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)</td>
</tr>
<tr>
<td>LC₅₀ fish 2</td>
<td>2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])</td>
</tr>
<tr>
<td>EC₅₀ other aquatic organisms 2</td>
<td>0.55 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)</td>
</tr>
</tbody>
</table>

**Persistence And Degradability**

<table>
<thead>
<tr>
<th>Econo-AF3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

**Bioaccumulative Potential**

<table>
<thead>
<tr>
<th>Econo-AF3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential</td>
<td>Not established.</td>
</tr>
</tbody>
</table>
Econo-AF3
Safety Data Sheet
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**Mobility In Soil**  Not available

**Other Adverse Effects**

**Other information:** Avoid release to the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste disposal recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

### SECTION 14: TRANSPORT INFORMATION

In accordance with ICAO/IATA/DOT/TDG

**UN Number**  Not regulated for transport

**UN Proper Shipping Name**  Not regulated for transport

**Additional information**  Not regulated for transport

**Overland transport**  Not regulated for transport

**Transport by sea**  Not regulated for transport

**Air transport**  Not regulated for transport

### SECTION 15: REGULATORY INFORMATION

#### US Federal regulations

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivatives, hydroxides, inner salts (61789-40-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Potassium formate (590-29-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### US State regulations

Potassium formate (590-29-4)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

#### Canadian regulations

**Econo-AF3**

WHMIS Classification  Class D Division 2 Subdivision B - Toxic material causing other toxic effects

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivatives, hydroxides, inner salts (61789-40-0)

Listed on the Canadian DSL (Domestic Sustances List) inventory.

Potassium formate (590-29-4)

Listed on the Canadian DSL (Domestic Sustances List) inventory.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

### SECTION 16: OTHER INFORMATION

**Party Responsible For The Preparation Of This Document:**

Economy Polymers & Chemicals

435 E. Anderson Road Houston, TX 77047

713-723-8416; 1-800-231-2066

08/23/2013  EN (English)  5/6
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.