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

1.1 Product identifier
Product Identifier: Acrylamide Solution, 30%
Product Number: A067
CAS Number: [79-06-1] Acrylamide
EC Number: [201-173-7] Acrylamide

1.2 Relevant identified uses of the substance or mixture and uses advised against
Recommended Use: Used in sodium dodecyl sulfate polyacrylamide gel electrophoresis
Restrictions of Use: Not for human or animal use

1.3 Details of the supplier of the safety data sheet
Distributor Name: TOKU-E Company
Distributor Address: 715 W Orchard Dr. Suite 3
Bellingham, WA 98225
Phone Number: (360)734-1789
E-mail Address: info@toku-e.com
Safety Data Sheet Issued by: TOKU-E Company (USA)

1.4 Emergency telephone number
Emergency Phone Number (International): +1 (352) 353-3500
Emergency Phone Number (US Only): 1 (800) 535-5053

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS Classification:
- Acute toxicity, oral (Category 4)
- Acute toxicity, dermal (Category 4)
- Eye irritation (Category 2A)
- Skin irritation (Category 2)
- Germ cell mutagenicity (Category 1B)
- Acute toxicity, inhalation (Category 5)
- Carcinogenicity (Category 1B)
- Specific organ toxicity, repeated exposure (Category 1)
- Sensitisation, skin (Category 1)
- Reproductive toxicity (Category 2)

(Please refer to Section 16 for regulatory information)

2.2 Label elements, including precautionary statements
GHS Label Elements:

Signal Word: Danger

Hazard Statements
H302+H312 Harmful if swallowed or in contact with skin
H319 Causes serious eye irritation
H315 Causes skin irritation
H340 May cause genetic defects
H333 May be harmful if inhaled
H350 May cause cancer
H372 Causes damage to organs through prolonged or repeated exposure
H317 May cause an allergic skin reaction
H361 Suspected of damaging fertility or the unborn child

Precautionary Statements
P264 Wash hands/skin thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician IF you feel unwell
P330 Rinse mouth
P302+P352 IF ON SKIN: Wash with plenty of water/soap
P321 Specific treatment, see applicable response statements on this label
P363 Wash contaminated clothing before reuse.
P501 Dispose of contents/container in accordance with governmental regulation
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P332+P313 IF SKIN irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P305+P351+ 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.
P260 Do not breathe dust/fumes/gas/mist/vapors/spray.
P314 Get medical advice/attention if you feel unwell.

2.3 Other hazards which do not result in classification
Hazards not otherwise classified (HNOC) by GHS No Data Available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures
SECTION 4: FIRST-AID MEASURES

4.1 Description of first-aid measures

General Advice
Consult a doctor/physician if exposed - additional medical care may be required. Show this Safety Data Sheet to the medical provider.

If Inhaled
If inhaled, move to fresh air. If not breathing, give artificial respiration and immediately call local emergency telephone number.

In Case of Skin Contact
Wash skin thoroughly with soap and water.

In Case of Eye Contact
Flush eye with water. After initial flush, remove any contact lenses and continue flushing for at least 15 minutes.

If Swallowed
Rinse mouth with water. Immediately call a doctor, physician, or poison control center. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms/effects, acute and delayed
Specific Treatment
Please see Section 2 and Section 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary
No data Available

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media
Water spray, alcohol-resistant foam, dry chemical, carbon dioxide

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products
Formed under fire conditions: carbon and nitrogen oxides, carbon monoxide, hydrogen peroxide

5.3 Advice for firefighters

Special Protective Equipment for Firefighters
Wear self-contained breathing apparatus

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

General
Evacuate personnel to a safe location. Use
appropriate personal protective equipment while in contact with product. Avoid dust formation. Ensure adequate ventilation.

Personal Precautions

Prevent contamination of skin, eyes and clothing with appropriate protective equipment (Section 8). Wear respiratory protection.

6.2 Environmental precautions

General

Recover waste, if possible, and place in suitable closed container for licensed disposal. Prevent spillage - do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

The recommended course of action is to treat any incident that involves the spill/release of a chemical substance as if it were hazardous in nature until the appropriate personnel have been consulted. Wear personal protective equipment as necessary. If accessible, use a spill kit. For powder spills, avoid generating dust during cleanup.

6.4 Reference to other sections

Refer to section 8 for exposure control. Refer to section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear appropriate protective clothing/gear to prevent contact with skin and eyes. Provide exhaust ventilation or respiratory protection in areas where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed container. Protect from humidity.

Recommended storage temperature: 2-8°C

Incompatibilities

No Data Available

7.3 Specific end use(s)

Refer to section 1.2

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

OSHA Permissible Exposure Limits

Calculated for mixture: 1000 mg/m³

NIOSH Recommended Exposure Limits

Calculated for mixture: 1000 mg/m³

ACGIH Threshold Limit Values

No Data Available

8.2 Exposure controls

PPE: Respiratory protection

Where risk assessment shows air-purifying
respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

PPE: Hand Protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands

PPE: Eye Protection
Use a face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

PPE: Skin and Body Protection
Handle with gloves. Wear protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place. When deemed needed according to the concentration and amount of this product, use a complete body suit

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Appearance Clear solution
Odor No Data Available
Odor Threshold No Data Available
pH No Data Available
Melting Point/Freezing Point No Data Available
Initial Boiling Point and Range No Data Available
Flash Point No Data Available
Evaporation rate No Data Available
Flammability (solid, gas) No Data Available
Upper Flammability/Explosion Limit No Data Available
Lower Flammability/Explosion Limit No Data Available
Vapor Pressure No Data Available
Vapor Density No Data Available
Relative Density No Data Available
Water Solubility No Data Available
Solubility in Other Solvents No Data Available
Partition Coefficient: n-octanol/water No Data Available
Auto-Ignition Temperature No Data Available
Decomposition Temperature No Data Available
Viscosity No Data Available
Explosive Properties No Data Available
SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
No Data Available

10.2 Chemical stability
Stable under recommended storage conditions

10.3 Possibility of hazardous reactions
No Data Available

10.4 Conditions to avoid
No Data Available

10.5 Incompatible materials
Strong oxidizing agents, acids, iron and iron salts, copper, brass, free radical initiators

10.6 Hazardous decomposition products
Formed under fire conditions: carbon and nitrogen oxides, carbon monoxide, hydrogen peroxide

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Route</th>
<th>Acute Toxicity Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD&lt;sub&gt;50&lt;/sub&gt;</td>
<td>413 mg/kg</td>
</tr>
<tr>
<td>Inhalation LC&lt;sub&gt;50&lt;/sub&gt;</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Dermal LD&lt;sub&gt;50&lt;/sub&gt;</td>
<td>1333 mg/kg</td>
</tr>
<tr>
<td>Intraperitoneal LD&lt;sub&gt;50&lt;/sub&gt;</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Intravenous LD&lt;sub&gt;50&lt;/sub&gt;</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Subcutaneous LD&lt;sub&gt;50&lt;/sub&gt;</td>
<td>No Data Available</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation
Acrylamide causes skin irritation, Category 2, and is present in solution at a classifiable concentration level.

Serious Eye Damage/ Eye Irritation
Acrylamide causes eye irritation, Category 2A, and is present in solution at a classifiable concentration level.

Respiratory or Skin Sensitization
Acrylamide is a Category 1 skin sensitizer, and is present in solution at a classifiable concentration level.

Germ Cell Mutagenicity
Acrylamide is a Category 2 Germ Cell Mutagenicity hazard, and is present in solution at a classifiable concentration level.

Carcinogenicity
Identified within National Toxicology Program Report on Carcinogens as reasonably anticipated to be a human carcinogen [Acrylamide].
Classified by International Agency for Research on Cancer Monograph as Group 2A, probably carcinogenic to humans [Acrylamide].

Reproductive Toxicity
Acrylamide is a Category 2 Reproductive Toxicity hazard, and is present in solution at a classifiable
Specific Target Organ Toxicity: Single Exposure (GHS)  
Acrylamide is a Category 1 specific organ toxicity (respiratory) hazard, single exposure, and is present in solution at a classifiable concentration level.

Specific Target Organ Toxicity: Repeated Exposure (GHS)  
No Data Available

Aspiration Hazard  
No Data Available

Potential Heath Effects  
See Section 2, Hazard(s) Identification

Signs and Symptoms of Exposure  
To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated

Synergistic Effects  
No Data Available

Additional Information  
No Data Available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity  
No Data Available

12.2 Persistence and degradability  
No Data Available

12.3 Bioaccumulative potential  
No Data Available

12.4 Mobility in Soil  
No Data Available

12.5 PBT and vPvB assessment  
No Data Available

12.6 Other adverse effects  
No Data Available

In the absence of complete ecological information, treat product as environmentally hazardous. Use proper storage, handling, and disposal to prevent unintentional release into the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods  
Dispose unused/spoiled product in accordance with local and federal regulations. Sewering is not an acceptable form of waste disposal.
Product  
Dispose of product through a licensed disposal company.

Contaminated Packaging  
Dispose of as unused product.

SECTION 14: TRANSPORTATION INFORMATION

DOT (US)  
UN Number: 3426, Class 6.1, Packing group III
Proper shipping name: Acrylamide solution
Poison inhalation hazard: No

IMDG  
UN Number: 3426, Class 6.1, Packing group III
Proper shipping name: ACRYLAMIDE SOLUTION
EMS-no. F-A, S-A
Marine pollutant: No

IATA
UN Number: 3426, Class 6.1, Packing group III
Proper shipping name: Acrylamide solution

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Section 2/3: Hazards identification/labelling in accordance with OSHA 29 CFR 1910.1200
Section 2/3: Hazards identification/labelling in accordance with Regulation (EC) 1272/2008
SDS in accordance with Regulation (EC) 1907/2006

SARA 302 Components
CAS Number [79-06-1]
Revision Date: 2017/01/18
The above components are subject to reporting levels established by SARA Title III, Section 302.

SARA 313 Components
CAS Number [79-06-1]
Revision Date: 2017/01/18
The above components are subject to reporting levels established by SARA Title III, Section 313

SARA 311/312 Hazards
CAS Number [79-06-1]
Revision Date 2017/01/18
The above components are subject to reporting levels established by SARA Title III, Section 311/312

Massachusetts Right to Know
CAS Number [79-06-1]
Revision Date 2017/01/18

Pennsylvania Right to Know
Acrylamide Solution, 30%
CAS Number [79-06-1]
Revision Date 2017/01/18

New Jersey Right to Know
Acrylamide Solution, 30%
CAS Number [79-06-1]
Revision Date 2017/01/18

California Prop. 65 Components
Reproductive
WARNING! This product contains a chemical known to the State of California to cause birth defects or other developmental harm, and cancer.

EU Information
SDS in accordance with Regulation (EC) 1907/2006
Identification, classification and labelling in accordance with Regulation (EC) 1272/2008
EC Number [201-173-7] [Acrylamide]
CAS Number [79-06-1] [Acrylamide]
Name: Acrylamide Solution, 30%
Envisaged Registration Deadline: No Data Available
15.2 Chemical safety assessment

EU Information

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

Revision Date: 2017-01-18

This safety data sheet represents TOKU-E Company’s current understanding of the hazards associated with this product. The stated hazard information is based on existing experimental data and is not guaranteed to be all-inclusive. TOKU-E Company strives to maintain current and comprehensive safety information but recognizes that this safety data sheet may require revision as new information becomes available. TOKU-E Company shall not be held liable for damage or injury resulting from contact, handling, or storage of this product.