1. IDENTIFICATION

Product Identifier: Puromycin aminonucleoside
Product Number: P041
Distributor Name: TOKU-E Company
Distributor Address: 715 W Orchard Dr. Suite 3
Bellingham, WA 98225
Phone Number: (360) 734-1789
Emergency Phone Number (International): +1 (352) 353-3500
Emergency Phone Number (US Only): 1 (800) 535-5053
Safety Data Sheet Issued by: TOKU-E USA
CAS-Number: [58-60-6]
EC/REACH Number: [200-388-3]
Recommended Use: Used to study human glomerular disease
Restrictions of Use: Not for human or animal use

2. HAZARD(S) IDENTIFICATION

GHS Classification: Specific target organ toxicity (kidney), repeated exposure (Category 2)

GHS Label Elements, Including:

Signal Word: Warning

Hazard Statements
H373 May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
P260 Do not breathe dust/fumes/gas/mist/vapors/spray.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with governmental regulation

Hazards not otherwise classified (HNOC) by GHS: No Data Available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym(s): Stylomycin aminonucleoside, Adenosine, 3'-amino-3'-deoxy-N,N-dimethyl-

Formula: C₁₂H₁₈N₆O₃
Molecular Weight: 294.31
CAS-Number: [58-60-6]
EC/REACH Number: [200-388-3]
Hazardous Components: Puromycin aminonucleoside
Specific target organ toxicity (kidney), repeated
4. 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.

Specific Treatment
Please see Section 2 precautionary statements and/or Section 11.

5. FIRE-FIGHTING MEASURES

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

Special Protective Equipment for Firefighters
Wear self-contained breathing apparatus

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

6. ACCIDENTAL RELEASE MEASURES

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.

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

7. HANDLING AND STORAGE

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.

Precautions for Safe Storage
Store in a tightly closed container. Protect from humidity.

Incompatibilities
No Data Available

Recommended storage temperature: 2-8°C
8. **EXPOSURE CONTROLS/ PERSONAL PROTECTION**

Contains no substance/substances with occupational exposure limit values

- **OSHA Permissible Exposure Limits**: No Data Available
- **NIOSH Recommended Exposure Limits**: No Data Available
- **ACGIH Threshold Limit Values**: No Data Available

**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

9. **PHYSICAL/CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White or off-white powder</td>
</tr>
<tr>
<td>Lower Flammability/Explosion Limit</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Upper Flammability/Explosion Limit</td>
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</tr>
<tr>
<td>Odor</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Odor Threshold</td>
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<tr>
<td>Vapor Density</td>
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<tr>
<td>pH</td>
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<tr>
<td>Relative Density</td>
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</tr>
<tr>
<td>Melting Point/Freezing Point</td>
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<tr>
<td>Water Solubility</td>
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<tr>
<td>Solubility in Other Solvents</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Boiling Point and Range</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No Data Available</td>
</tr>
</tbody>
</table>
Evaporation rate: No Data Available
Flammability (solid, gas): No Data Available
Partition Coefficient: n-octanol/water: No Data Available
Ignition Temperature: No Data Available
Auto-Ignition Temperature: No Data Available
Decomposition Temperature: No Data Available
Viscosity: No Data Available
Density: No Data Available
Optical Rotation: No Data Available
Absorbance (290nm, 5% in H₂O): No Data Available
Water Content (Loss on Drying): Not more than 7.0%

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended storage conditions
Possibility of Hazardous Reactions: No Data Available
Conditions to Avoid: No Data Available
Materials to Avoid: Strong oxidizing agents
Hazardous Decomposition Products: Formed under fire conditions: carbon and nitrogen oxides, carbon monoxide, hydrogen peroxide

11. TOXICOLOGICAL INFORMATION

Oral LD₅₀: No Data Available
Inhalation LC₅₀: No Data Available
Dermal LD₅₀: No Data Available
Intraperitoneal LD₅₀: No Data Available
Intravenous LD₅₀: No Data Available
Subcutaneous LD₅₀: No Data Available
Skin Corrosion/Irritation: No Data Available
Serious Eye Damage/ Eye Irritation: No Data Available
Respiratory or Skin Sensitization: Human lung, 6 mg/L
Germ Cell Mutagenicity: DNA inhibition
Carcinogenicity: This substance has not been identified as a potential carcinogen within the National Toxicology Program Report on Carcinogens or within the International Agency for Research on Cancer Monograph.

Reproductive Toxicity

Rat: Female TDLo 105 ug/kg, subcutaneous
5-11 days post conception
Reproductive - Fertility - abortion
Rat: Female TDLo 45 mg/kg, subcutaneous
8-10 days post conception
Reproductive - Specific Developmental Abnormalities, urogenital system.

Specific Target Organ Toxicity: Single Exposure (GHS)
Specific Target Organ Toxicity: Repeated Specific target organ toxicity (kidney), repeated
Exposure (GHS)
Aspiration Hazard
Potential Health Effects
Signs and Symptoms of Exposure
Synergistic Effects
Additional Information

No Data Available
No Data Available

12. ECOLOGICAL INFORMATION
Toxicity
Persistence and Degradability
Bio accumulative Potential
Mobility in Soil
PBT and vPvB Assessment

No Data Available
No Data Available
No Data Available
No Data Available
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.

13. DISPOSAL CONCENTRATIONS
Product
Contaminated Packaging

Dispose of product through a licensed disposal company.
Dispose of as unused product.

14. TRANSPORTATION INFORMATION
DOT (US)
IMDG
IATA

Not a Dangerous Good
Not a Dangerous Good
Not a Dangerous Good

15. REGULATORY INFORMATION
SARA 302 Components
SARA 313 Components
SARA 311/312 Hazards
Massachusetts Right to Know
Pennsylvania Right to Know
New Jersey Right to Know
California Prop. 65 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 311/312
No components are subject to the Massachusetts Right to Know Act
No components are subject to the Pennsylvania Right to Know Act
No components are subject to the New Jersey Right to Know Act
No
This product does not contain any chemicals known to the State of California to cause birth defects, cancer, or any other reproductive harm.

EU Information
SDS in accordance with REACH 1907/2006
EC/ REACH Number [200-388-3]
CAS-Number [58-60-6]
Name: Puromycin aminonucleoside
Envisaged Registration Deadline: 30/11/2010
See GHS Information under Section 2, Hazard Identification

16. OTHER INFORMATION
Revision Date: 2016-10-12

HMIS Rating
Health Hazard 0
Chronic Health Hazard Y
Flammability 0
Physical Hazard 0

NFPA Rating
Health Hazard 0
Fire Hazard 0
Reactivity Hazard 0

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.