

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

**1.1 Product Identifier:**

**Trade Name** ALLANTOIN USP  
**INCI Name** Allantoin  
**EINECS Name** Urea, (2,5-dioxo-4-imidazolidinyl)

**1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:**

**Product Use:** Active ingredient in cosmetic and personal care applications

**1.3 Details of the Supplier of the Safety Data Sheet:**

**Supplier:** TRI-K INDUSTRIES, INC.  
2 Stewart Court  
Denville, NJ 07834  
**Information Phone Number:** (973) 298-8850  
**E-mail** info@tri-k.com

**1.4 Emergency Telephone Number:**

**Emergency Spill Information** (973) 298-8850 (TRI-K Industries, Inc.)  
(800) 222-1222 (National Poison Control Center)

**24-HOUR EMERGENCY  
TELEPHONE NUMBER**

**CHEMTREC (800) 424-9300**

**SDS Date of Preparation:** July 16, 2015

**SDS Date of Revision:** September 9, 2020

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the Substance or Mixture:**

**Classification according to Regulation (EC) No 1272/2008 [CLP]:**

The substance does not meet the criteria for a hazardous substance

**Classification according to Directive 1999/45/EC [DPD]:**

The substance does not meet the criteria for dangerous substances

**2.2 Label Elements: Labeling according to Regulation (EC) No 1272/2008 [CLP]**

Not applicable

Hazard Statement: Not applicable

Precautionary Statement: Not applicable

**2.3 Other Hazards: None**

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS#	EINECS#	DSD Classification (67/548/EEC)	CLP Classification (EC) No 1272/2008	%
Urea, (2,5-dioxo-4-imidazolidinyl)	97-59-6	202-592-8	Not classified as dangerous	Not classified as hazardous	99

**Additional information:** For full text of H-statements and R-phrases: see SECTION 16

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of First Aid Measures:**

**Eye Contact:** Flush with water; seek medical advice if discomfort persists

**Skin Contact:** Wash material off the skin with soap and water

**Inhalation:** Not applicable, avoid breathing liquid or aerosols of material

**Ingestion:** Drink water, seek medical attention

**4.2 Most Important symptoms and effects, both acute and delayed:**

Not expected to be a skin or eye irritant (based on available data). Non-toxic by oral ingestion (based on nature of material). No other adverse clinical effects are known to be associated with exposure to this material.

**4.3 Indication of any immediate medical attention and special treatment needed:**

No immediate medical treatment normally needed.

**SECTION 5: FIRE FIGHTING MEASURES**

**5.1 Suitable Extinguishing Media:**

Carbon dioxide, foam, dry chemical powder, water spray.

**5.2 Special Hazards Arising from the Substance or Mixture:**

Formation of carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen oxides, and formaldehyde in the event of fire or during thermal decomposition.

**5.3 Advice for Fire-Fighters:**

**Special Fire Fighting Procedures:**

Wear suitable protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode (EN 137). Use water spray to cool closed containers at risk from fire and, if possible, remove them from the danger area. Do not discharge contaminated extinguish water into the soil, surface water, groundwater or sewer system.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:**

Use suitable personal protective equipment as recommended in Section 8. Ensure adequate ventilation. Remove all the ignition sources.

**6.2 Environmental Precautions:**

Prevent contamination of soil, surface water, and groundwater or sewer system.

**6.3 Methods and Material for Containment and Cleaning Up:**

Examine possibilities for re-utilization of product. Collect the spillage preferably by vacuum or wet sweeping and carefully transfer to a suitable container for recovery or disposal. Wash contaminated surfaces by water.

**6.4 Reference to Other Sections:**

Treat recovered material as prescribed in Section 13.

Refer to Section 8 for protective equipment and Section 13 for disposal considerations

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for Safe Handling:**

Handle in accordance with good industrial hygiene and safety practices. Wear personal protective equipment as recommended in Section 8. Ensure adequate ventilation. Do not breathe dusts.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:**

Fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. Keep away from sources of ignition. Take precautions against accumulation of electrostatic charge. Do not smoke. Hygroscopic product. Keep in the original well closed containers in a cool, dry place.

**7.3 Specific end use(s):** Active ingredient in cosmetic and personal care applications

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control Parameters:**

Chemical Name	8.1.1 Occupational Exposure Limits:	8.1.2 Additional exposure limits under the conditions of use:	8.1.3 DNEL/DMEL and PNEC-Values:
Urea, (2,5-dioxo-4-imidazolidinyl)	None	Not Available	Not Available

**8.2 Exposure Controls:** Observe the usual precautionary measures in handling the chemicals to keep a minimal exposure. Do not breathe dusts. Wash hands after handling. Remove contaminated

clothing and wash before reuse.

**8.2.1 Appropriate Engineering Controls:** General mechanical ventilation is acceptable

**8.2.2 Individual protection measures, such as personal protective equipment:**

**Eye/face protection:** Not Required

**Hand Protection:** Not Required

**Body Protection:** Wear protective working clothing.

**Respiratory Protection:** Use a mask for solid particles (EN 149, Type FFP1, FFP2) when performing operations involving exposure to dusts.

**Thermal Hazards:** None required under normal conditions of use

**Other:** An eye wash facility should be available in the work area. Employees must practice good personal hygiene, washing exposed areas of the skin several times daily. Launder contaminated clothing before re-use.

**8.2.3 Environmental Exposure Controls:** Emissions from production processes and ventilation units should be controlled in compliance with environmental regulations.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic Physical and Chemical Properties:**

<b>Appearance:</b> White Fine Powder	<b>Vapor Pressure:</b> $4.32 \times 10^{-9}$
<b>Odor:</b> Odorless	<b>Vapor Density:</b> Not determined
<b>Odor Threshold:</b> No data available	<b>Specific Gravity:</b>
<b>pH:</b> About 4	<b>Water Solubility:</b> Slightly soluble
<b>Melting Point / freezing point:</b> About 230°C	<b>Partition coefficient: n-octanol/water:</b> $\log K_{ow} = -3.14$
<b>Boiling Point:</b> Not applicable	<b>Auto-ignition Temperature:</b> Not Available
<b>Flash Point (COC):</b> Not available	<b>Decomposition Temperature:</b> Not Available
<b>Evaporation Rate:</b> Not Applicable	<b>Viscosity (cP):</b> Not determined
<b>Flammability (solid, gas):</b> Not Applicable	<b>Explosion Properties:</b> None
<b>Upper/lower flammability or explosive limits:</b> Not Applicable	<b>Oxidizing Properties:</b> None

**9.2 Other Information:**

None

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:**

Not reactive under normal conditions of use

**10.2 Chemical Stability:**

Stable if handled and stored as recommended in Section 7.

**10.3 Possibility of Hazardous Reactions:**

None known

**10.4 Conditions to Avoid:**

None known

**10.5 Incompatible Materials:**

Avoid strong acids and basis.

**10.6 Hazardous Decomposition Products:**

See Section 5.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on Toxicological Effects:**

**Acute oral toxicity (rat):** LD<sub>50</sub> > 10000 mg/kg

**Acute dermal toxicity (rabbit):** LD<sub>50</sub> > 5000 mg/kg

**Acute inhalation toxicity:** Not available.

**Sub-chronic oral toxicity:** Not available.

**Sub-chronic dermal toxicity:** Not available.

**Skin irritation (rabbit):** Not irritating

**Eye irritation (rabbit):** Not irritating

**Sensitization (guinea pig):** Not sensitizing

**Chronical toxicity:** No carcinogenic, mutagenic or teratogenic effects known.

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Toxicity:**

EC<sub>50</sub> (24h) = 5000 mg/L (*Lepomis macrochirus*)

EC<sub>50</sub> (24h) = 5000 mg/L (*Oncorhynchus mykiss*)

EC<sub>50</sub> (24h) = 5000 mg/L (*Petromyzon marinus*)

**12.2 Persistence and Degradability:**

Readily biodegradable

76% (OECD) 301B,) )

**12.3 Bio accumulative Potential:**

Low bioaccumulation is expected

Log K<sub>ow</sub> = -3.14 (allantoin)

BCF = not available

**12.4 Mobility in Soil:**

Not available

**12.5 Results of PBT and vPvB Assessment:**

Not available

**12.6 Other Adverse Effects:**

None known

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste Treatment Methods:**

Product residues should be packaged, sealed, labeled and disposed of or incinerated in a suitable installation according to relevant local and national regulations. Contaminated empty containers should be treated in the same manner as the content.

**SECTION 14: TRANSPORT INFORMATION**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

	US DOT	EU land transport (ADR/RID/ADN)	Sea Transport (IMDG)	Air Transport (ICAO/IATA)
<b>14.1 UN Number</b>	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2 UN Proper Shipping Name</b>	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3 Transport Hazard Class(es)</b>	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4 Packing Group</b>	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5 Environmental Hazards</b>	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.6 Special Precautions for user</b>	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Information not relevant	Information not relevant	Information not relevant	Information not relevant

**SECTION 15: REGULATORY INFORMATION**

**15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:**

**EU EINECS/ELINCS/NLP:** Listed on the EINECS Inventory.

<b>Canada DSL/NDSL:</b>	Listed on DSL
<b>US TSCA</b>	Not applicable
<b>Korea KECI:</b>	Listed
<b>China IECSC:</b>	Listed on the IECSC
<b>Japan ENCS:</b>	Listed on the Japanese Existing and New Chemical Substances Inventory
<b>Philippine PICCS:</b>	Listed on the PICCS
<b>Australia AICS:</b>	Listed on the AICS

## SECTION 16: OTHER INFORMATION

### 16.1 Indication of Changes

Version 1 created on May 30, 2015  
 Version 2 created on July 16, 2015  
 Version 4 created on February 28, 2018  
 Version 5 created on March 5, 2018  
 Version 6 created on September 9, 2020

### 16.2 Bibliography:

EP, USP, JP, JSCI, MERCK INDEX, ESIS, ECHA, NIOSH, RTECS, HSDB.

### 6.3 Legal Disclaimer

The statements contained in this document are for informational purposes only and are intended to be generally representative of the raw material supplied by Tri-K Industries, Inc. or its affiliates (collectively, "Tri-K"). They are derived from information obtained from tests and analysis, including those conducted by Tri-K's vendors. The recipient of this document is cautioned against relying on it without independent investigation as to the accuracy and completeness of the statements set forth herein, or the suitability or fitness of the raw material for any particular purpose. This document does not constitute a representation or warranty by Tri-K; the parties' written agreement is the sole and exclusive source of any representation or warranty. TRI-K HEREBY DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.