

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

1.1 Product Identifier:

Trade Name Amino Silk NPNF®
INCI Name Silk Amino Acids

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:

Manufacturer: TRI-K INDUSTRIES, INC.
2 Stewart Court
Denville, NJ 07834
Information Phone Number: +1 (973) 298-8850
E-mail info@tri-k.com

1.4 Emergency Telephone Number:

Emergency Spill Information +1 (973) 298-8850 (TRI-K Industries, Inc.)
+1 (800) 222-1222 (National Poison Control Center)

24-HOUR EMERGENCY TELEPHONE NUMBER CHEMTREC +1 (800) 424-9300 or +1 (703) 527-3887

SDS Date of Revision: August 8, 2016

SDS Date of Preparation: June 11, 2015

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 The Hazard Communication Standard (HCS) (29 CFR 1910.1200)

The substance does not meet the criteria for dangerous substance

2.2 Label Elements:

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	%
Water	7732-18-5	231-791-2	Not classified as dangerous	Not classified as hazardous	80.0 – 86.0%
Silk Amino Acids	96690-41-4	306-235-8	Not classified as dangerous	Not classified as hazardous	14.0 – 20.0%

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:

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:

Dry chemical, CO₂, foam, halon, water spray (fog)

5.2 Special Hazards Arising from the Substance or Mixture:

Unusual Fire and Explosion Hazards: None known

Hazardous Decomposition Products: None known

5.3 Advice for Fire-Fighters:

Special Fire Fighting Procedures:

Self-contained breathing apparatus with full-face piece and protective clothing. Do not use direct or heavy water stream to fight fire as it may splash burning liquid.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Ensure adequate ventilation. Use chemical safety goggles for eye/face protection.

6.2 Environmental Precautions:

Non-hazardous but avoid direct releases to the environment

6.3 Methods and Material for Containment and Cleaning Up:

Pick up with absorbent material and collect for disposal

6.4 Reference to Other Sections:

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

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Keep working place well ventilated; no special precautions are needed under normal use conditions

7.2 Conditions for Safe Storage, Including any Incompatibilities:

Avoid temperatures above 40°C. Optimum storage temperature is 24°C or lower. Do not freeze. Avoid exposure to sunlight for prolonged periods.

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:
Water	No limits established	Not Available	Not Available
Silk Amino Acids	No limits established	Not Available	Not Available

8.2 Exposure Controls:

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: Chemical goggles with side splash protection recommended

Hand Protection: Protective gloves

Body Protection: None required under normal conditions of use

Respiratory Protection: None required under normal conditions of use

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: Non-hazardous but avoid direct releases to the environment

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties:

Appearance: Clear, amber liquid	Vapor Pressure: Not determined
Odor: Characteristic, faint	Vapor Density: Not determined
Odor Threshold: No data available	Specific Gravity: ~1.05 @ 25°C
pH: 3.5 – 5.5	Water Solubility: Complete
Melting Point / freezing point: Not determined	Partition coefficient: n-octanol/water: Not Available
Boiling Point: 215°F / 101.6°C	Auto-ignition Temperature: Not Available
Flash Point (COC): > 250° F (Not flammable)	Decomposition Temperature: Not Available
Evaporation Rate: Not Applicable	Viscosity (cP): Not determined
Flammability (solid, gas): Not Applicable	Explosion Properties: None
Upper/lower flammability or explosive limits: Not Applicable	Oxidizing Properties: 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:

No known hazardous reactions

10.3 Possibility of Hazardous Reactions:

None known

10.4 Conditions to Avoid:

Gross bacterial contamination

10.5 Incompatible Materials:

Concentrated nitric or sulfuric acid, strong oxidizing agents.

10.6 Hazardous Decomposition Products:

Burning can produce smoke, CO, CO₂, ammonia and other products of incomplete combustion

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Acute toxicity: Oral LD50 is anticipated to be >5g/kg based on testing of similar materials.

Irritation: Not determined

Corrosivity: This is not a corrosive product.

Sensitization: Not determined

Repeated dose toxicity: No data available

Carcinogenicity: None of the components are listed as a carcinogen by IARC, NTP, OSHA, ACGIH or the EU Substances Directive.

Mutagenicity: Not expected to be a germ cell mutagenicity hazard

Toxicity for reproduction: Not expected to affect reproduction or development.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity: No ecotoxicity data available

Acute (short-term) toxicity: N/A

Fish: N/A

Crustacea: N/A

Algae/aquatic plants: N/A

Other organisms: N/A

Chronic (long-term) toxicity: N/A

Fish: N/A

12.2 Persistence and Degradability:

Not available.

12.3 Bio accumulative Potential:

Not expected to be bio-accumulative in aquatic organisms

12.4 Mobility in Soil:

Since the product is completely soluble in water, it is expected to be highly mobile in soil.

12.5 Results of PBT and vPvB Assessment:

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other Adverse Effects:

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Dispose in accordance with local and federal environmental regulations

SECTION 14: TRANSPORT INFORMATION

	US DOT	EU land transport (ADR/RID/ADN)	Sea Transport (IMDG)	Air Transport (ICAO/IATA)
14.1 UN Number				
14.2 UN Proper Shipping Name	Not regulated	Not regulated	Not regulated	Not regulated
14.3 Transport Hazard Class(s)				
14.4 Packing Group				
14.5 Environmental Hazards	Not applicable	Not applicable	Not applicable	Not applicable
14.6 Special Precautions for user	None	None	None	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU EINECS/ELINCS/NLP:	All components of this product are listed on the EINECS Inventory.
Canada DSL/NDSL:	All components of this product are listed on the DSL/NDSL
US TSCA	CAS no. 96690-41-4 not listed
Korea KECI:	All components of this product are listed on the ECL.
China IECSC:	All components of this product are listed on the IECSC.
Japan ENCS:	All components are listed on the Japanese Existing and New Chemical Substances Inventory.
Philippine PICCS:	All components of this product are listed on the PICCS
Australia AICS:	All components of this product are listed on the AICS

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: OTHER INFORMATION

16.1 Indication of Changes

Version 1 created on June 11, 2015.

Version 2 created on March 16, 2016

Version 3 created on August 8, 2016

16.2 List of Relevant R- phrases (number and full text):

Not applicable

16.3 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.