Athens Research and Technology, Inc.

Revision Date: 18 Dec 24

SDS – SAFETY DATA SHEET

Version: 3

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 – Product Identifiers

Product Name: Plasmin, Human Plasma (frozen)

Synonyms: PLM, Fibrinolysin

Product Number: 16-16-161213-F

Brand: Athens Research and Technology

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

Identified uses: Research Reagent Only, Not Approved for Therapeutic Use

Uses Advised Against: Not for Use as a Drug or Drug Component for Humans or Animals

1.3 – Details of the Supplier of the Safety Data Sheet

Supplier: Athens Research and Technology
110 Trans Tech Drive
Athens, GA 30601
USA

Email: sales@athensresearch.com

Telephone: +1 706-546-0207

Fax: +1 706-546-7395

1.4 – Emergency Telephone Number

Emergency Phone: +1 706-546-0207

Section 2: Hazards Identification

2.1 – Classification of the Substance or Mixture

GHS Classification: Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

OSHA Classification: No known OSHA Hazards

2.2 – GHS Label Elements, including precautionary statements – Not a hazardous substance or mixture.

2.3 – Hazards not otherwise classified (HNOC) or not covered by GHS - Human source material

Section 3: Composition/Information on Ingredients

3.1 – Substance – Plasmin from Human Plasma. The product contains no substances which at their present concentrations are considered hazardous to health.

3.2 – Mixtures

Chemical ID	Synonyms	CAS-No.	EC-No.	Classification	Concentration
H_2O	Water	7732-18-5	231-791-2	N/A	≤73.7%
$C_3H_8O_3$	Glycerol	56-81-5	200-289-5	N/A	≤25%
NaH_2PO_4	Sodium phosphate, monobasic, Monosodium phosphate	7558-80-7	686-250-7	N/A	≤1.20%
Plasmin	PLM, Fibrinolysin	9001-90-5	231-640-3	N/A	≥0.1%
$C_6H_{13}NO_2$	ε-Aminocaproic Acid, EACA,	60-32-2	200-469-3	N/A	≤0.013%

6-Aminohexanoic acid

Section 4: First Aid Measures

4.1 – Description of First Aid Measures

If Inhaled – If inhaled, move person into fresh air. If not breathing, give CPR

In Case of Skin Contact – Remove contaminated clothing. Wash skin with soap and water

In Case of Eye Contact – Flush eyes with plenty of water. Remove contact lens

If Swallowed - Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult physician

4.2 – Most Important Symptoms and Effect, both Acute and Delayed – No Information Available

4.3 – Indication of Immediate Medical Attention and Special Treatment Needed – Notes to Physician – Treat Symptomatically

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Section 5: Firefighting Measures

5.1 – Extinguishing Media - Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. No limitations of extinguishing agents are given.

5.2 – Special Hazards Arising from Substance – Carbon oxides Mixture with combustible ingredients. Development of hazardous combustion gases or vapours possible in the event of fire.

Carbon oxides
Nitrogen Oxides (Nox)
Oxides of phosphorus
Sodium oxides

5.3 – Advise for Firefighters – Use SCBA and full turn-out gear

5.4 – Further Information – Suppress (knockdown) gases/vapors/mists with a water spray jet

Section 6: Accidental Release Measures

6.1 – Personal Precautions, Protective Equipment and Emergency Procedures – Safety glasses/goggles, gloves, lab coat. Avoid inhalation of dust

6.2 – Environmental Precautions - Do not let product enter drain system

6.3 – Methods and Material for Containment and Cleaning up - Pick up and arrange disposal in accordance with existing disposal practices employed for infectious waste at your location. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 – Reference to Other Sections – See Section 13 for disposal

Section 7: Handling and Storage

7.1 – Precautions for Safe Handling – Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 – Conditions for Safe Storage, including any Incompatibilities – Keep container tightly closed in a dry and well-ventilated place. Recommended Storage temperature: -70°C

Storage class Storage class (TRGS 510): 10: Combustible liquids

7.3 – Specific End Uses – Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

Section 8: Exposure Controls/Personal Protection

8.1 – Control Parameters – Exposure Limit Value –

Components	CAS-No.	Value	Control Parameters	Basis
Glycerol	56-81-5	TWA	5 mg/m^3	USA.OSHA -Table Z-1 Limits for Air

		contaminants
TWA	15 mg/m^3	USA.OSHA -Table Z-1 Limits for Air contaminants
PEL	10 mg/m^3	California, Title 8 Article 107
PEL	5 mg/m^3	California, Title 8 Article 107

8.2 – Exposure Controls

Appropriate engineering controls – Change contaminated clothing. Wash hands after working with substance

Personal Protective Equipment

Respiratory Protection – Ensure adequate ventilation

Hand Protection – Handle with gloves, inspect prior to use

Eye Protection – Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH or EN 166

Skin & Body Protection – Lab coat, long pants/skirt, and closed toe shoes. PPE must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Engineering Measures – Ensure adequate ventilation

Hygiene Measures – General industrial hygiene practice

Control of Environmental Exposure – No special precautions necessary

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Section 9: Physical and Chemical Properties

9.1 – Information on Basic Physical and Chemical Properties

Physical State @ 20°C	Aqueous solution

Color	Clear
Odor	No data available
pH	7.3
Melting point/Freezing Point	No data available
Boiling Point/Boiling Range	No data available
Flash Point	No data available
Flammability	No data available
Ignition temperature	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor pressure	No data available
Density	No data available
Solubility in Water	No data available
Solubility in Oil	No data available
Solubility in Acetone	No data available
Relative vapor density	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Partition coefficient n-octanol/water	No data available
Evaporation Rate	No data available
Odor Threshold	No data available
Particle Characteristics	Not Applicable

9.2 – Other information – 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

10.6 – Hazardous Decomposition Products – In the event of fire see Section 5

Section 11: Toxicological Information

11.1 – Information on Hazard Classes

Mixture

Acute Toxicity Data

Oral – No data available

Inhalation – No data available

Dermal – No data available

Ingestion – No data available

Skin Corrosion/Irritation – No data available

Serious Eye Damage/Irritation – No data available

Respiratory or Skin sensitization – No data available

Related Symptoms – No data available

Acute & Chronic Effects – No data available

Reproductive toxicity – No data available

Teratogenicity – No data available

Germ cell Mutagenicity – No data available

STOT-single exposure – No data available

STOT-repeated exposure – No data available

Aspiration Hazard – No data available

Carcinogenicity

IARC – No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.

NTP – No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen.

OSHA – No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Component - Glycerol

Acute Toxicity Data

Oral – LD50 Oral - Rat - female - 27,200 mg/kg

Remarks: (ECHA)

Inhalation – LC50 Inhalation - Rat - male and female - 4 h - > 5,850 mg/l - aerosol

Remarks: (ECHA)

Dermal – LD50 Dermal - Guinea pig - male and female - 56,750 mg/kg

Remarks: (ECHA)

Ingestion – May be harmful if swallowed.

Skin Corrosion/Irritation – May be harmful if absorbed through the skin. May cause irritation.

Serious Eye Damage/Irritation – May cause eye irritation.

Respiratory or Skin sensitization – May be harmful if inhaled. May cause respiratory tract irritation.

Related Symptoms – No data available

Acute & Chronic Effects – No data available

Reproductive toxicity – No data available

Teratogenicity – No data available

Germ cell Mutagenicity – No data available

STOT-single exposure – No data available

STOT-repeated exposure – No data available

Aspiration Hazard – No data available

Carcinogenicity

IARC – No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.

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OSHA – No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

11.2 – Information on Other Hazards – Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Kidney - Irregularities - Based on Human Evidence

Section 12: Ecological Information

12.1 – Ecotoxicity - No data available

12.2 – Persistence/Degradability - No data available

12.3 – Bioaccumulation potential - No data available

12.4 – Mobility in Soil - No data available

12.5 – Results of PBT and vPvB assessment - No data available

12.6 – Endocrine disrupting properties - No data available

12.7 – Other Adverse Effects –

Glycerine

Toxicity to fish - static test LC50 - Oncorhynchus mykiss (rainbow trout) –

54,000 mg/l - 96 h

Remarks: (ECHA)

Section 13: Disposal Considerations

13.1 – Waste Treatment Methods

Contaminated Packaging – Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste from Residues/Unused Products – Dispose of in accordance with local regulations

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Section 14: Transport Information

DOT – Not dangerous goods. This substance is considered to be non-hazardous for transport.

ADR – Not dangerous goods. This substance is considered to be non-hazardous for transport.

IATA – Not dangerous goods. This substance is considered to be non-hazardous for transport.

Section 15: Regulatory Information

15.1 – Safety, Health, and Environmental Regulations

OSHA Hazards	No known OSHA hazards
SARA 311/312 Hazards	No SARA hazards.
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels.

Massachusetts Right to Know Components	H_2O CAS-No. 7732-18-5 $C_3H_8O_3$ CAS-No. 56-81-5 NaH_2PO_4 CAS-No. 7558-80-7 Plasmin CAS-No. 9001-90-5 $C_3H_{13}NO_2$ CAS-No. 60-32-2
Pennsylvania Right to Know Components	H_2O CAS-No. 7732-18-5 $C_3H_8O_3$ CAS-No. 56-81-5 NaH_2PO_4 CAS-No. 7558-80-7 Plasmin CAS-No. 9001-90-5 $C_3H_{13}NO_2$ CAS-No. 60-32-2
New Jersey Right to Know Components	H_2O CAS-No. 7732-18-5 $C_3H_8O_3$ CAS-No. 56-81-5 NaH_2PO_4 CAS-No. 7558-80-7 Plasmin CAS-No. 9001-90-5 $C_3H_{13}NO_2$ CAS-No. 60-32-2
California Prop. 65 Components	This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

15.2 Chemical Safety Assessment - No data available

Section 16: Other Information

The above information is believed to be correct but does not purport to be all inclusive. It shall be used only as a guide for experienced personnel. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

This material is a laboratory reagent for research use only. It is not to be administered to humans or used for any drug purpose.

Athens Research and Technology shall not be held liable for any damage resulting from handling or from contact with the above product. See www.athensresearch.com for additional terms and conditions of sale.

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Version 3