

# Athens Research and Technology, Inc.

## SDS - SAFETY DATA SHEET


### 1. IDENTIFICATION

PRODUCT NAME	Defensins (Human Neutrophil Peptides), Human Neutrophil
PRODUCT NO.	16-14-081416
BRAND	Athens Research and Technology
Use of substance	Research Reagent

SUPPLIER	Athens Research and Technology 110 Trans Tech Drive Athens, GA 30601 USA
TELEPHONE	+1 706-546-0207
FAX	+1 706-546-7395
EMERGENCY PHONE	+1 706-546-0207

### 2. HAZARDS IDENTIFICATION

OSHA Hazards	Acetic Acid-Target Organ Effect, Corrosive
Other Hazards which do not result in classification	Human Source: Appropriate safety procedure must be followed for human source material as found in: <i>Laboratory Biosafety Guidelines (3<sup>rd</sup> Ed., 2004)</i> Handle as if capable of transmitting infectious agents.
Target Organs	Teeth, Kidney

GHS Classification	Acetic Acid - Skin corrosion (Category 1A) Acetic Acid - Serious eye damage (Category 1)
Signal Word	Danger
Pictograms	

#### Hazard Statements:

H303	Ingestion	May be harmful if swallowed
H314	Skin	Causes severe skin damage
H314	Eyes	Causes severe eye damage
H333/H335	Inhalation	May be harmful if inhaled. Material (Acetic Acid) is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

#### Precautionary Statements:

P280	Wear protective gloves/protective clothing/eye protection/face protection
P305+P351+P338	IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing.

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<b>P310</b>	Immediately call a POISON CENTER or doctor/physician
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HMIS Classification:		NFPA Rating:	
<b>HEALTH</b>	<b>3</b>	<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>0</b>	<b>FIRE</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>	<b>REACTIVITY</b>	<b>0</b>
<b>PERSONAL PROTECTION</b>	Safety Glasses/gloves	<b>SPECIAL</b>	

### 3. COMPOSITION/INFORMATION ON INGREDIENTS:

SUBSTANCE					MIXTURE
Chemical ID	Common name/synonym	CAS-No.	EC No.	Classification	Concentration
Defensins, Mixed	Human Neutrophil Peptides, HNP	-	-	-	≥0.08%
C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	Acetic Acid, Glacial Acetic Acid	64-19-7	200-580-7	Flam. Liq. 3; Skin Corr. 1A; H226, H314	≤6.0%
H <sub>2</sub> O	Water	7732-18-5	231-791-2	-	≤94%

See Section 16 for full text of H-Statements

### 4. FIRST AID MEASURES

<b>Inhalation</b>	If inhaled, move person into fresh air. If not breathing, give CPR. Consult a physician
<b>Skin Contact</b>	In case of skin contact wash off with soap and plenty of water. Consult a physician
<b>Eye Contact</b>	In case of eye contact flush eyes with water for 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
<b>Ingestion</b>	DO NOT induce vomiting. If swallowed never give anything by mouth to an unconscious person. Rinse mouth with water. Consult physician.
<b>General Advise</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

### 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Hazards From Chemical</b>	Not flammable or combustible

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<b>Special PPE for Firefighters</b>	Use SCBA and full turnout gear
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## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Safety glasses/goggles, gloves, labcoat. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental Precautions</b>	Do not let product enter drain system
<b>Methods &amp; Materials for containment and clean up</b>	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

<b>Precautions for safe handling</b>	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
<b>Conditions for safe storage</b>	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended Storage temperature: -70 C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Limit Value</b>	<b>Component</b>	<b>CAS No.</b>	<b>Value</b>	<b>Control parameters</b>	<b>Basis</b>
	Acetic Acid	64-19-7	TWA	10ppm	USA, ACGIH Threshold Limit Values (TLV)
	Remarks	Eye & Respiratory Tract Irritation Pulmonary Function.			
			STEL	15ppm	USA. ACGIH Threshold Limit Values (TLV)
		Eye & Respiratory Tract Irritation Pulmonary Function.			
			ST	15ppm, 37mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
			TWA	10ppm, 25mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
			TWA	10ppm, 25mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		The value in mg/m <sup>3</sup> is approximate.			
<b>PPE – Personal Protective Equipment</b>	<b>Respiratory Protection</b> – Use in a well ventilated area. <b>Hand Protection</b> – Handle with gloves, inspect prior to use <b>Eye Protection</b> – Use equipment for eye protection tested and approved under				

	<p>appropriate government standards such as NIOSH or EN 166</p> <p><b>Skin &amp; Body Protection</b> – PPE must be selected according to the concentration and amount of the dangerous substance at the specific workplace.</p> <p><b>Hygiene Measures</b> – General industrial hygiene practice</p>
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Form	Aqueous solution
Color	clear liquid

### SAFETY DATA

pH	~2.5-3.0, acidic
Melting point/Freezing Point	No data available
Boiling Point	No data available
Flash Point	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
Odor Characteristics	No data available
Evaporation rate	No data available

## 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	No data available

## 11. Toxicological Information

Acute Toxicity Data: No data available

### NUMERIC MEASURES OF TOXICITY

Oral LD50	No data available
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Inhalation LC50	No data available
Dermal LD50	No data available
Other acute toxicity information	No data available

#### ROUTES OF EXPOSURE

Ingestion	May be harmful if swallowed
Skin	May be harmful if absorbed through the skin. May cause irritation.
Eyes	May cause eye irritation
Inhalation	May be harmful if inhaled. May cause respiratory tract infection

#### Potential Health Effects

Single Exposure	No data available
Repeated Exposure	No data available
Related Symptoms	No data available
Acute & Chronic Effects	No data available
Reproductive toxicity	No data available
Teratogenicity	No data available
Mutagenicity	No data available

Signs and Symptoms of Exposure – to the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### Carcinogenicity

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as possible or confirmed human carcinogen.
NTP	
OSHA	

### 12. Ecological Information

Ecotoxicity, Persistence/Degradability, Bioaccumulation, Mobility in Soil, and Other Adverse Effects: No Data Available

### 13. Disposal Considerations

Contaminated packaging	Dispose of unused product in accordance with environmental control regulations
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### 14. Transport Information

DOT Classification	Not dangerous goods. This substance is considered to be non-hazardous for transport. Non-hazardous for air transport.
IMDG	Not dangerous goods.

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

## 15. Regulatory Information

OSHA Hazards	Target Organ effect, Corrosive
SARA 311/312 Hazards	Acute Health Hazard, Chronic Health Hazard
SARA 302 Components Subject to reporting levels established by SARA Title III, Section 302:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components Subject to reporting levels established by SARA Title III, Section 313:	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	Defensins, Mixed -CAS-No. Not available Acetic Acid -CAS No. 64-19-7 Water -CAS No. 7732-18-5
Pennsylvania Right To Know Components	Defensins, Mixed -CAS-No. Not available Acetic Acid -CAS No. 64-19-7 Water -CAS No. 7732-18-5
New Jersey Right To Know Components	Defensins, Mixed -CAS-No. Not available Acetic Acid -CAS No. 64-19-7 Water -CAS No. 7732-18-5
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.

## 16. Other Information

Text of H-codes mentioned Section 3  
 Flam. Liq. - Flammable liquids  
 H226 - Flammable liquid and vapor  
 H314 - Causes severe skin and eye damage.  
 Skin Corr. - Skin Corrosion

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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.

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SDS Document preparation date: 21 October 2013  
Version 2.1