

# Athens Research and Technology, Inc.

## SDS - SAFETY DATA SHEET

### 1. IDENTIFICATION

PRODUCT NAME	<b>Immunoglobulin G1, Human Myeloma Plasma</b>
PRODUCT NO.	<b>16-16-090707-1M</b>
BRAND	<b>Athens Research and Technology</b>
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	No known OSHA Hazards
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.

GHS Classification	Not a dangerous substance or mixture according to the Globally Harmonised System (GHS)
Signal Word	Warning

#### Hazard Statements:

<b>H303</b>	<b>Ingestion</b>	May be harmful if swallowed
<b>H313/H316</b>	<b>Skin</b>	May be harmful if absorbed through the skin. May cause irritation.
<b>H319</b>	<b>Eyes</b>	May cause eye irritation
<b>H333/H335</b>	<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.

HMIS Classification:		NFPA Rating:	
<b>HEALTH</b>	<b>1</b>	<b>HEALTH</b>	<b>1</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>	

16-16-090707-1M - Immunoglobulin G1, Human Myeloma Plasma

Athens Research & Technology

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

The product contains no substances which at their present concentrations are considered to be hazardous to health.

SUBSTANCE					MIXTURE
Chemical ID	Common name/synonym	CAS-No.	EC No.	Classifications	Concentration
IgG1	Immunoglobulin G1	-	-	-	≥0.1%
NaH <sub>2</sub> PO <sub>4</sub> +H <sub>2</sub> O	Sodium phosphate, monobasic, monohydrate/ Monosodium phosphate	10049-21-5	231-449-2	-	≤0.3%
NaCl	Sodium Chloride/ Halite	7647-14-5	231-598-3	-	≤0.9%
NaN <sub>3</sub>	Sodium Azide	26628-22-8	247-852-1	-	≤0.05%
H <sub>2</sub> O	Water	7732-18-5	231-791-2	-	≤98%

**4. FIRST AID MEASURES**

<b>Inhalation</b>	If inhaled, move person into fresh air. If not breathing, give CPR
<b>Skin Contact</b>	In case of skin contact wash off with soap and plenty of water
<b>Eye Contact</b>	In case of eye contact flush eyes with water
<b>Ingestion</b>	If swallowed never give anything by mouth to an unconscious person. Rinse mouth with water. Consult physician.

**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
<b>Special PPE for Firefighters</b>	Use SCBA and full turnout gear
<b>Hazardous Combustion Products</b>	Hazardous decomposition products formed under fire conditions. Nature of decomposition products not known

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Safety glasses/goggles, gloves, labcoat.
<b>Environmental Precautions</b>	Do not let product enter drain system
<b>Methods &amp; Materials</b>	Pick up and arrange disposal in accordance with existing disposal

16-16-090707-1M - Immunoglobulin G1, Human Myeloma Plasma

Athens Research & Technology

<b>for containment and clean up</b>	practices employed for infectious waste at your location. Sweep up and shovel. Keep in suitable, closed containers for disposal.
-------------------------------------	--

## 7. HANDLING AND STORAGE

<b>Precautions for safe handling</b>	Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.
<b>Conditions for safe storage</b>	Keep container tightly closed in a dry and well-ventilated place. Recommended Storage temperature: -20 C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Limit Value</b>	Contains no substances with occupational exposure limit values
<b>PPE – Personal Protective Equipment</b>	<p><b>Respiratory Protection</b> – Not required</p> <p><b>Hand Protection</b> – Handle with gloves, inspect prior to use</p> <p><b>Eye Protection</b> – Use equipment for eye protection tested and approved under 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>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

<b>Form</b>	Aqueous Solution
<b>Color</b>	Clear liquid

### SAFETY DATA

<b>pH</b>	7.4
<b>Melting point/Freezing Point</b>	No data available
<b>Boiling Point</b>	No data available
<b>Flash Point</b>	No data available
<b>Ignition temperature</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Density</b>	No data available

16-16-090707-1M - Immunoglobulin G1, Human Myeloma Plasma

Athens Research & Technology

<b>Solubility in Water</b>	No data available
<b>Solubility in Oil</b>	No data available
<b>Solubility in Acetone</b>	No data available
<b>Relative vapor density</b>	No data available
<b>Odor Characteristics</b>	No data available
<b>Evaporation rate</b>	No data available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under recommended storage conditions
<b>Possibility of hazardous reactions</b>	No data available
<b>Conditions to Avoid</b>	No data available
<b>Materials to Avoid</b>	Halogenated hydrocarbon, Acids, Metals, Acid Chlorides
<b>Hazardous Combustion Products</b>	Hazardous decomposition products formed under fire conditions. Nature of decomposition products not known

## 11. Toxicological Information

### Acute Toxicity Data:

### NUMERIC MEASURES OF TOXICITY

<b>Oral LD50</b>	Rabbit - 10mg/kg (Sodium azide)
<b>Inhalation LC50</b>	Rat - 37mg/m <sup>3</sup> (Sodium azide)
<b>Dermal LD50</b>	Rabbit - 20mg/kg (Sodium azide)
<b>Other acute toxicity information</b>	No data available
<b>Remarks</b>	Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Other. Behavioral: Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration: Structural or functional change in trachea or bronchi.

### ROUTES OF EXPOSURE

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

### Potential Health Effects

<b>Single Exposure</b>	No data available
<b>Repeated Exposure</b>	No data available
<b>Related Symptoms</b>	No data available
<b>Acute &amp; Chronic Effects</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>Teratogenicity</b>	No data available

<b>Mutagenicity</b>	No data available
---------------------	-------------------

Signs and Symptoms of Exposure – Nausea, Headache, Vomiting. Laboratory experiments in animals have shown sodium azide to produce a profound hypotensive effect, demyelination of myelinated nerve fibers in the central nervous system, testicular damage, blindness, attacks of rigidity, and hepatic and cerebral effects. (Sodium azide)

#### Carcinogenicity

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

### 12. Ecological Information

**Ecotoxicity, Persistence/Degradability, Bioaccumulation, Mobility in Soil, and Other Adverse**

**Effects:** Toxicity to daphnia and other aquatic invertebrates - EC50 - Daphnia pulex (Water flea) - 4.2 mg/l - 48 h (Sodium azide)

### 13. Disposal Considerations

<b>Contaminated packaging</b>	Dispose of unused product in accordance with environmental control regulations
-------------------------------	--

### 14. Transport Information

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

### 15. Regulatory Information

<b>OSHA Hazards</b>	No known OSHA hazards
<b>SARA 311/312 Hazards</b>	No SARA hazards Reportable qty: lowest RQ>999999 lbs
<b>SARA 302 Components</b> Subject to reporting levels established by SARA Title III, Section 302:	Sodium Azide –CAS.-No. 26628-22-8

16-16-090707-1M - Immunoglobulin G1, Human Myeloma Plasma

Athens Research & Technology

<b>SARA 313 Components</b> 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.
<b>Massachusetts Right To Know Components</b>	IgG1 - CAS-No. Not available Sodium phosphate, monobasic –CAS-No. 10049-21-5 Sodium Chloride –CAS-No. 7647-14-5 Sodium Azide –CAS. No. 26628-22-8 Water –CAS-No. 7732-18-5
<b>Pennsylvania Right To Know Components</b>	IgG1 - CAS-No. Not available Sodium phosphate, monobasic –CAS-No. 10049-21-5 Sodium Chloride –CAS-No. 7647-14-5 Sodium Azide –CAS. No. 26628-22-8 Water –CAS-No. 7732-18-5
<b>New Jersey Right To Know Components</b>	IgG1 - CAS-No. Not available Sodium phosphate, monobasic –CAS-No. 10049-21-5 Sodium Chloride –CAS-No. 7647-14-5 Sodium Azide –CAS. No. 26628-22-8 Water –CAS-No. 7732-18-5
<b>California Prop. 65 Components</b>	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

Copyright 2013 Athens Research and Technology, Inc. License granted to make unlimited paper copies for internal use only.

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](http://www.athensresearch.com) for additional terms and conditions of sale.

SDS Document preparation date: 22 October 2013 Version 2.1