


## 1 Identification

- **Product identifier**
- **Trade name:** alpha-Fetoprotein (AFP) Antigen
- **Article number:** 77093
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
MP Biomedicals, LLC  
29525 Fountain Parkway  
Solon, OH 44139  
United States  
www.mpbio.com
- **Information department:** Product safety department
- **Emergency telephone number:** CHEMTREC: 1-800-424-9300 (1-703-527-3887)


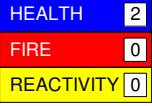
## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The product is not classified according to the Globally Harmonized System (GHS).

---

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  **Harmful**  
Harmful if swallowed.
- **Information concerning particular hazards for human and environment:**  
The product has to be labeled due to the calculation procedure of international guidelines.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

---

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**
-  Health = 2  
Fire = 0  
Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**
-  HEALTH 2 Health = 2  
FIRE 0 Fire = 0  
REACTIVITY 0 Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/17/2014

Reviewed on 02/17/2014

**Trade name: alpha-Fetoprotein (AFP) Antigen**

(Contd. of page 1)

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 26628-22-8	sodium azide	≤0.1%
EINECS: 247-852-1		

### 4 First-aid measures

- **Description of first aid measures**
- **General information:**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

USA

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/17/2014

Reviewed on 02/17/2014

**Trade name: alpha-Fetoprotein (AFP) Antigen**

(Contd. of page 2)

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** 2 - 8 °C
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

**26628-22-8 sodium azide**

<b>REL</b>	Ceiling limit value: 0.3** mg/m <sup>3</sup> , 0.1* ppm *as HN <sub>3</sub> ; **as NaN <sub>3</sub> ; Skin
<b>TLV</b>	Ceiling limit value: 0.29** mg/m <sup>3</sup> , 0.11* ppm *as HN <sub>3</sub> vapor **as NaN <sub>3</sub>

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

USA

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/17/2014

Reviewed on 02/17/2014

Trade name: *alpha-Fetoprotein (AFP) Antigen*

(Contd. of page 3)

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	According to product specification
Odor:	Characteristic
Odour threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**

Decomposition temperature:	Not determined.
----------------------------	-----------------

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapor pressure at 20 °C (68 °F):** 23 hPa (17 mm Hg)

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

Water:	Fully miscible.
--------	-----------------

- **Partition coefficient (n-octanol/water):** Not determined.

- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

- **Solvent content:**

Organic solvents:	0.0 %
Water:	98.6 %

Solids content:	1.4 %
-----------------	-------

- **Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Possibility of hazardous reactions** No dangerous reactions known.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/17/2014

Reviewed on 02/17/2014

**Trade name:** alpha-Fetoprotein (AFP) Antigen

(Contd. of page 4)

- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

26628-22-8 sodium azide

Oral	LD50	27 mg/kg (rat)
Dermal	LD50	20 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/17/2014

Reviewed on 02/17/2014

**Trade name:** *alpha-Fetoprotein (AFP) Antigen*

(Contd. of page 5)

· **Recommended cleansing agent:** *Water, if necessary with cleansing agents.*

## 14 Transport information

<b>· UN-Number</b>		
<b>· DOT, ADR, ADN, IMDG, IATA</b>		<i>Void</i>
<b>· UN proper shipping name</b>		
<b>· DOT, ADR, ADN, IMDG, IATA</b>		<i>Void</i>
<b>· Transport hazard class(es)</b>		
<b>· DOT, ADR, ADN, IMDG, IATA</b>		
<b>· Class</b>		<i>Void</i>
<b>· Packing group</b>		
<b>· DOT, ADR, IMDG, IATA</b>		<i>Void</i>
<b>· Environmental hazards:</b>		
<b>· Marine pollutant:</b>		<i>No</i>
<b>· Special precautions for user</b>		<i>Not applicable.</i>
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>		<i>Not applicable.</i>
<b>· UN "Model Regulation":</b>		<i>-</i>

## 15 Regulatory information

<b>· Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
<b>· Sara</b>	
<b>· Section 355 (extremely hazardous substances):</b>	
26628-22-8	<i>sodium azide</i>
<b>· Section 313 (Specific toxic chemical listings):</b>	
26628-22-8	<i>sodium azide</i>
<b>· TSCA (Toxic Substances Control Act):</b>	
7647-14-5	<i>Sodium Chloride</i>
7558-79-4	<i>SODIUM PHOSPHATE DIBASIC ANHYDROUS</i>
26628-22-8	<i>sodium azide</i>
7558-80-7	<i>SODIUM PHOSPHATE MONOBASIC</i>
7732-18-5	<i>water, distilled</i>
<b>· Proposition 65</b>	
<b>· Chemicals known to cause cancer:</b>	
<i>None of the ingredients is listed.</i>	
<b>· Chemicals known to cause reproductive toxicity for females:</b>	
<i>None of the ingredients is listed.</i>	
<b>· Chemicals known to cause reproductive toxicity for males:</b>	
<i>None of the ingredients is listed.</i>	

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 02/17/2014

Reviewed on 02/17/2014

**Trade name: alpha-Fetoprotein (AFP) Antigen**

(Contd. of page 6)

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

26628-22-8 sodium azide

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **GHS label elements** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Department issuing MSDS:** Product safety department

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent