	<b>MATERIAL SAFETY DATA SHEET</b>			
	<b>Referency MSDS- ANNEXIN V/PI KIT-3</b>	<b>Revision Number</b>  4	<b>Last Revision date:</b>  08-01-16	<b>Page number:</b>  Page 1 of 2

## 1. COMPANY AND PRODUCT IDENTIFICATION

<b>Product Name:</b>	<b>ANNEXIN V AND PROPIDIUM IODIDE APOPTOSIS DETECTION KIT</b>
<b>Manufacturer / Supplier:</b>	IMMUNOSTEP, S.L. Avd. Universidad de Coimbra, s/n. Centro de Investigación del Cáncer (CIC) Campus Miguel de Unamuno 37007 Salamanca-Spain Tfno/Fax: +34 923294827
<b>Information relative to Technical Services:</b>	tech@immunostep.com
<b>Emergency Information:</b>	+34915620420 // Instituto Nacional de Toxicología. Madrid.

## 2. INFORMATION ABOUT COMPONENTS

### 2.1. Description:

Annexin V phosphate buffer 0,01 M diluted, with 0,1 % sodium azide as a preservative.

Binding Buffer.

Propidium Iodide.

### 2.2. hazardous ingredients:

COMPONENT	Num.- CAS	MOLECULAR WEIGHT	% w/v
PROPIDIUM IODIDE ( PI)	25535-16-4	668,39 g/mol	<0,01
SODIUM AZIDE (NaN <sub>3</sub> )	26628-22-8	65,0099	>0,09

Buffered aqueous solution, with components that are below the regulatory threshold limits according EC No 1272/2008 .

## 3. HAZARDS IDENTIFICATION


The toxicity information that follows describes the hazards associated with Sodium azide and Propidium Iodide. To the best of our knowledge, no other hazards are associated with this product.

**Code Letter, hazard designation & symbol for Propidium Iodide:**



**Code Letter, hazard designation & symbol for Sodium Azide:**



	<b>MATERIAL SAFETY DATA SHEET</b>			
	Referency MSDS- ANNEXIN V/PI KIT-3	Revision Number  4	Last Revision date:  08-01-16	Page number:  Page 1 of 2

- **Information pertaining to Sodium Azide.**

- After inhalation: Remove to fresh air. If individual is not breathing, give artificial respiration and obtain medical attention.
- After skin contact: Immediately wash with copious amounts of water while removing contaminated clothing.
- After eye contact: Rinse opened eye for 15 minutes under running water and seek medical advice.
- After swallowing: Wash out mouth with water and seek medical advice immediately showing the container or label of the product.

- **Information pertaining to Propidium Iodide.**


- After skin contact: Immediately wash with copious amounts of water while removing contaminated clothing.
- After eye contact: Rinse opened eye for 15 minutes under running water and seek medical advice.
- After swallowing: Wash out mouth with water and seek medical advice immediately showing the container or label of the product.

#### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	<ul style="list-style-type: none"> <li>• Water spray</li> <li>• Carbon dioxide, dry chemical powder or appropriate foam</li> </ul>
<b>Special firefighting procedures:</b>	<ul style="list-style-type: none"> <li>• Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.</li> </ul>
<b>Unusual fire and explosions hazards:</b>	<ul style="list-style-type: none"> <li>• Sodium azide upon thermal decomposition may emit toxic gases, including nitrogen oxides. However, due to the composition and volume of this product, combustion products generated from it are not expected to present a significant hazard.</li> </ul>

#### 6. ACCIDENTAL RELEASE MEASURES

- Wear protective equipment.
- Absorb with liquid-binding material and placed in closed containers for disposal. Avoid generation of aerosols during clean up.
- Ventilate area and wash spill site after material pickup is complete.

	<b>MATERIAL SAFETY DATA SHEET</b>			
	Referency MSDS- ANNEXIN V/PI KIT-3	Revision Number  4	Last Revision date:  08-01-16	Page number:  Page 1 of 2

## 7. HANDLING AND STORAGE

### 7.1 Sodium Azide

#### 7.1.1 Handling precautions

- Avoid inhaling, ingestion and contact with eyes and skin.

#### 7.1.2 Storage:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>Requirements to be met by storerooms and receptacles:</li> </ul>     | No special requirements   |
| <ul style="list-style-type: none"> <li>Information about storage in one common storage facility:</li> </ul> | Do not store together with oxidizing and acidic materials as well as heavy-metal compounds. |
| <ul style="list-style-type: none"> <li>Further information about storage conditions:</li> </ul>             | None  |

### 7.2 Propidium Iodide:

#### 7.2.1 Handling precautions.

- Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

#### 7.2.2 Storage:

Store container at 2-8°. Protect from the light.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of material with critical values that have to be monitored at the workplace.


**Engineering controls:** Use in well ventilated area.

**Respiratory protection:** Not required.

**Eye protection:** Safety glasses


**Body protection:** Protective work clothing; impervious gloves, such as latex or equivalent, should be worn to prevent skin contact



	<b>MATERIAL SAFETY DATA SHEET</b>			
	Referency MSDS- ANNEXIN V/PI KIT-3	Revision Number  4	Last Revision date:  08-01-16	Page number:  Page 1 of 2

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>9.1 PROPIDIUM IODIDE</b>  <b>Physical state:</b>  <b>Colour:</b>  <b>Odour:</b>  <b>Change in condition</b>  <b>Flash point:</b>  <b>Danger of explosion:</b>  <b>Vapour pressure:</b>  <b>Density:</b>  <b>Solubility in water:</b>  <b>pH:</b>	Solid  Red  Odourless  Melting point: Not determined Boling point: Not determined  Not applicable  Forms very sensitive explosive metallic compounds  Not available  Not determined  Soluble  Not determined
<b>9.2 Sodium Azide</b>  <b>Physical state:</b>  <b>Colour:</b>  <b>Odour:</b>  <b>Change in condition</b>  <b>Flash point:</b>  <b>Danger of explosion:</b>  <b>Vapour pressure:</b>  <b>Density:</b>  <b>Solubility in water:</b>  <b>pH:</b>	Solid, crystalline  White  Odourless  Melting point: Not determined Boling point: Not determined  Not applicable  Forms very sensitive explosive metallic compounds  Not available  Not determined  Soluble  10 at 65 g/l at 25 °C

	<b>MATERIAL SAFETY DATA SHEET</b>			
	Referency MSDS- ANNEXIN V/PI KIT-3	Revision Number  4	Last Revision date:  08-01-16	Page number:  Page 1 of 2

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal temperatures and pressures
<b>Material to be avoid</b>	<ul style="list-style-type: none"> <li>• Strong oxidizing agents</li> <li>• Metals and metallic compounds</li> <li>• Cyano compounds</li> </ul>
<b>Dangerous decompositions products:</b>	Sodium azide forms explosive compounds with heavy metals. Repeated contact of low concentration of azide with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.
<b>Additional information:</b>	Nitrogen oxides (NOx)  Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in metal drains.


## 11. TOXICOLOGICAL INFORMATION

Sodium Azide	
<b>Acute toxicity for hazardous ingredients:</b>	<ul style="list-style-type: none"> <li>• Oral LD50 Rat: 27 mg/Kg</li> </ul> <p>Although its concentration in this product is low, sodium azide is harmful if swallowed, inhaled or absorbed through</p>
<b>Potential effects of chronic exposure:</b>	Prolonged or repeated exposure to sodium azide may result in pounding headaches, eye and nose irritation, low blood pressure, fatigue and dizziness.

## 12. ECOLOGICAL INFORMATION

Propidium Iodide	
<b>Potencial effects of acute exposure and repeated:</b>	It can cause irritation or burning of the skin and eyes on contact. The inhalation or ingestion of large volúmenes can cause burning of the mucous membrane, irritación en breathing.
<b>Potencial effects of chroninc exposure:</b>	Powerful mutagenic agent

**Ecotoxicity:** Toxic for fish and other water organism

	<b>MATERIAL SAFETY DATA SHEET</b>			
	Referency MSDS- ANNEXIN V/PI KIT-3	Revision Number  4	Last Revision date:  08-01-16	Page number:  Page 1 of 2

### 13. DISPOSAL CONSIDERATIONS.

<b>Recommendation:</b>	<ul style="list-style-type: none"> <li>Observe all state and local environmental regulations.</li> </ul>
<b>Uncleaned packagings:</b>	<ul style="list-style-type: none"> <li>Recommendation: Disposal must be according to state and local regulations.</li> <li>Recommended cleansing agent: Water, if necessary with cleansing agents.</li> </ul>

### 14. TRANSPORT INFORMATION

<b>RID /ADR:</b>	Non-hazardous for road transport.
<b>IMDG:</b>	Non-hazardous for sea transport.
<b>ICAO/IATA:</b>	Non-hazardous for air transport.

### 15. OTHER INFORMATION

The above information represents the best information currently available for us. However this reagent may present unknown hazards and should be used with caution. Independent professional opinions regarding the risk or exposure to this solution are the responsibility of the user.