

12/03/2002

Kit components

| Product code | Description |
|--------------|-------------|
|--------------|-------------|

| | |
|---------------|---|
| 559763 | Annexin V-PE Apoptosis Detection Kit I |
|---------------|---|

Components:

| | |
|---------|---|
| 559763a | Annexin V-PE (65875X) |
| 559763b | Annexin V Binding Buffer, 10X concentration (|
| 559763c | 7-AAd (68981E) |

1 Identification of substance:**· Product details:**

· Product name: Annexin V-PE (65875X)
(Annexin V-PE Apoptosis Detection Kit I)

· Catalog number: 559763, 6900KK

· Manufacturer/Supplier:
BD Biosciences, Pharmingen
10975 Torreyana Road
San Diego, CA 92121-1106
Tel. (858)812-8800

· Information department: Technical Services

· Emergency information:

In case of a chemical emergency, spill, fire, exposure, or accident call BD Biosciences, Pharmingen at (858)812-8800 or (877)232-8995, or ChemTrec at (800)424-9300

2 Composition/Data on components:**· Chemical characterization:****· CAS No. Description:**

Not applicable

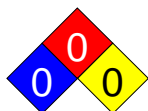
· Chemical characterization

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components: Void

3 Hazards identification**· Hazard description:**

This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.

· NFPA ratings (scale 0-4)

Health = 0

Fire = 0

Reactivity = 0

4 First aid measures

· General information No special measures required.

· After inhalation Seek medical treatment in case of complaints.

· After skin contact Immediately wash with water and soap and rinse thoroughly.

· After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing If symptoms persist consult doctor.

· Information for doctor Show this label.

Product name: Annexin V-PE (65875X)
(Annexin V-PE Apoptosis Detection Kit I)

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5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

7 Handling and storage

- **Handling**
 - **Information for safe handling:** No special measures required.
 - **Information about protection against explosions and fires:** No special measures required.
- **Storage**
 - **Requirements to be met by storerooms and receptacles:** 4 C
 - **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
 - **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal Protective Equipment**
 - **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
 - **Breathing equipment:**
In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
 - **Protection of hands:**



Chemical resistant gloves.

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

Product name: Annexin V-PE (65875X)
(Annexin V-PE Apoptosis Detection Kit I)

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9 Physical and chemical properties:

· General Information

Form: Liquid
Color: Pink
Odor: Odorless

· Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined

· **Flash point:** Not applicable

· **Danger of explosion:** Forms very sensitive explosive metallic compounds.

· **Vapor pressure:** Not applicable

· **Density:** Not determined

· **Solubility in / Miscibility with**
Water: Soluble

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· Materials to be avoided:

Incompatible materials: acidic material and metals
Incompatible material: strong oxidizers.

· **Dangerous reactions** No dangerous reactions known

· **Dangerous products of decomposition:** No dangerous decomposition products known

· Additional information:

Sodium azide is present in this product. Contact with acidic solutions and metal compounds over time may form potentially explosive metal azides. Should any of this material be introduced into a sanitary sewer system, flush with copious amounts of water.

11 Toxicological information

· Acute toxicity:

· Primary irritant effect:

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information:

· Ecotoxicological effects:

· Other information:

The ecological effects have not been thoroughly investigated, but currently none have been identified.

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Product name: Annexin V-PE (65875X)
(Annexin V-PE Apoptosis Detection Kit I)

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· **General notes:** Not known to be hazardous to water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must adhere to state and federal regulations.
Smaller quantities can be disposed of with solid waste.
Disposal must be made according to the regulations found in 40 CFR 261.
This product is not considered a RCRA hazardous waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulations

- **SARA Section 355 (extremely hazardous substances)**
None of the ingredients is listed.
- **SARA Section 313 (specific toxic chemical listings)**
None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act)**

| | |
|------------|--------------|
| 9048-46-8 | BSA |
| 26628-22-8 | sodium azide |
| 60-00-4 | EDTA |
- **California Proposition 65 - Chemicals known to cause cancer**
None of the ingredients is listed.
- **California Proposition 65 - Chemicals known to cause reproductive toxicity**
None of the ingredients is listed.

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Material Safety Data Sheet
acc. to ISO/DIS 11014

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Reviewed on 12/03/2002

Product name: Annexin V-PE (65875X)
(Annexin V-PE Apoptosis Detection Kit I)

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· Cancerogenity categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

26628-22-8 | sodium azide | A4

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· Product related hazard informations:

Observe the general safety regulations when handling chemicals

The product is not subject to identification regulations pertaining to regulations on hazardous materials.

16 Other information:

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company, nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

· Department issuing MSDS: Safety & Environment Department

· Contact: Technical Service Representative

1 Identification of substance:**· Product details:**

· Product name: Annexin V Binding Buffer, 10X concentration (66121E)
(Annexin V-PE Apoptosis Detection Kit I)

· Catalog number: 559763, 6900KK

· Manufacturer/Supplier:
BD Biosciences, Pharmingen
10975 Torreyana Road
San Diego, CA 92121-1106
Tel. (858)812-8800

· Information department: Technical Services

· Emergency information:

In case of a chemical emergency, spill, fire, exposure, or accident call BD Biosciences, Pharmingen at (858)812-8800 or (877)232-8995, or ChemTrec at (800)424-9300

2 Composition/Data on components:**· Chemical characterization**

· Description: Mixture of the substances listed below with nonhazardous additions.

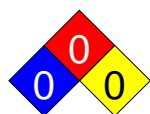
· Dangerous components: Void

3 Hazards identification**· Hazard description:**

This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.

· Classification system

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· NFPA ratings (scale 0-4)

Health = 0

Fire = 0

Reactivity = 0

4 First aid measures

· General information No special measures required.

· After inhalation Seek medical treatment in case of complaints.

· After skin contact Immediately wash with water and soap and rinse thoroughly.

· After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing If symptoms persist consult doctor.

· Information for doctor Show this label.

Product name: Annexin V Binding Buffer, 10X concentration (66121E)
(Annexin V-PE Apoptosis Detection Kit I)

(Contd. of page 1)

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** 4 C
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** None.
- **Storage class**
- **Class according to regulation on flammable liquids:** Void

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal Protective Equipment**
- **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:**
In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
- **Protection of hands:**



Chemical resistant gloves.

- **Eye protection:** Safety glasses

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USA



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Product name: Annexin V Binding Buffer, 10X concentration (66121E)
(Annexin V-PE Apoptosis Detection Kit I)

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· **Body protection:** Protective work clothing (lab coat).

9 Physical and chemical properties:

· General Information

| | |
|---------------|----------|
| Form: | Liquid |
| Color: | Clear |
| Odor: | Odorless |

| | |
|---------------------------------------|----------------|
| · Change in condition | Undetermined |
| · Melting point/Melting range: | Not determined |
| · Boiling point/Boiling range: | Not determined |

| | |
|-----------------------|----------------|
| · Flash point: | Not applicable |
|-----------------------|----------------|

| | |
|-------------------------|-------------------------------|
| · Auto igniting: | Product is not self igniting. |
|-------------------------|-------------------------------|

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

| | |
|--------------------------|----------------|
| · Vapor pressure: | Not applicable |
|--------------------------|----------------|

| | |
|-------------------|----------------|
| · Density: | Not determined |
|-------------------|----------------|

| | |
|--|---------|
| · Solubility in / Miscibility with Water: | Soluble |
|--|---------|

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Materials to be avoided:** Incompatible material: strong oxidizers.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **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 is not subject to OSHA classification according to internally approved calculation methods for preparations.
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

USA

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Printing date 12/03/2002

Reviewed on 12/03/2002

Product name: Annexin V Binding Buffer, 10X concentration (66121E)
(Annexin V-PE Apoptosis Detection Kit I)

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12 Ecological information:

- **Ecotoxic effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must adhere to state and federal regulations.
Smaller quantities can be disposed of with solid waste.
Disposal must be made according to the regulations found in 40 CFR 261.
This product is not considered a RCRA hazardous waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulations

- **SARA Section 355 (extremely hazardous substances)**
None of the ingredients is listed.
- **SARA Section 313 (specific toxic chemical listings)**
None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act)**
None of the ingredients is listed.
- **California Proposition 65 - Chemicals known to cause cancer**
None of the ingredients is listed.
- **California Proposition 65 - Chemicals known to cause reproductive toxicity**
None of the ingredients is listed.

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Product name: Annexin V Binding Buffer, 10X concentration (66121E)
(Annexin V-PE Apoptosis Detection Kit I)

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· **Carcinogenicity categories**

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

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals

The product is not subject to identification regulations pertaining to regulations on hazardous materials.

· **National regulations**

· **Classification according to VbF: Void**

· **Water hazard class: Generally not hazardous for water.**

16 Other information:

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company, nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

· **Department issuing MSDS: Safety & Environment Department**

· **Contact: Technical Service Representative**

1 Identification of substance:

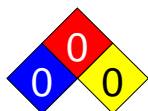
- **Product details:**
- **Product name:** 7-AAAd (68981E)
(Annexin V-PE Apoptosis Detection Kit I)
- **Catalog number:** 559763, 6900KK
- **Manufacturer/Supplier:**
BD Biosciences, Pharmingen
10975 Torreyana Road
San Diego, CA 92121-1106
Tel. (858)812-8800
- **Information department:** Technical Services
- **Emergency information:**
In case of a chemical emergency, spill, fire, exposure, or accident call BD Biosciences, Pharmingen at (858)812-8800 or (877)232-8995, or ChemTrec at (800)424-9300

2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Description:**
Not applicable
- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:** Void

3 Hazards identification

- **Hazard description:**
This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.
- **NFPA ratings (scale 0-4)**



Health = 0
Fire = 0
Reactivity = 0

4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- **After swallowing** If symptoms persist consult doctor.

Product name: 7-AA4 (68981E)
(Annexin V-PE Apoptosis Detection Kit I)

(Contd. of page 1)

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

7 Handling and storage

- **Handling**
 - **Information for safe handling:** No special measures required.
 - **Information about protection against explosions and fires:** No special measures required.
- **Storage**
 - **Requirements to be met by storerooms and receptacles:** 4 C
 - **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
 - **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal Protective Equipment**
 - **General protective and hygienic measures**
The usual precautionary measures for handling chemicals should be followed.
 - **Breathing equipment:**
In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
 - **Protection of hands:**



Chemical resistant gloves.

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

USA

(Contd. on page 3)

Product name: 7-AAAd (68981E)
(Annexin V-PE Apoptosis Detection Kit I)

(Contd. of page 2)

9 Physical and chemical properties:

· General Information

Form: Liquid
Color: Pink
Odor: Characteristic

· Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined

· **Flash point:** Not applicable

· **Danger of explosion:** Forms very sensitive explosive metallic compounds.

· **Vapor pressure:** Not applicable

· **Density:** Not determined

· **Solubility in / Miscibility with**
Water: Soluble

· **pH-value:** Not applicable

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· Materials to be avoided:

Incompatible materials: acidic material and metals
Incompatible material: strong oxidizers.

· **Dangerous reactions** No dangerous reactions known

· **Dangerous products of decomposition:** No dangerous decomposition products known

· Additional information:

Sodium azide is present in this product. Contact with acidic solutions and metal compounds over time may form potentially explosive metal azides. Should any of this material be introduced into a sanitary sewer system, flush with copious amounts of water.

11 Toxicological information

· Acute toxicity:

· Primary irritant effect:

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.



Printing date 12/03/2002

Reviewed on 12/03/2002

Product name: 7-AAAd (68981E)
(Annexin V-PE Apoptosis Detection Kit I)

(Contd. of page 3)

12 Ecological information:

- **Ecotoxicological effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Not known to be hazardous to water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must adhere to state and federal regulations.
Smaller quantities can be disposed of with solid waste.
Disposal must be made according to the regulations found in 40 CFR 261.
This product is not considered a RCRA hazardous waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

15 Regulations

- **SARA Section 355 (extremely hazardous substances)**
None of the ingredients is listed.
- **SARA Section 313 (specific toxic chemical listings)**
None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act)**
26628-22-8 | sodium azide
- **California Proposition 65 - Chemicals known to cause cancer**
None of the ingredients is listed.
- **California Proposition 65 - Chemicals known to cause reproductive toxicity**
None of the ingredients is listed.

(Contd. on page 5)



Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 12/03/2002

Reviewed on 12/03/2002

Product name: 7-AAAd (68981E)
(Annexin V-PE Apoptosis Detection Kit I)

(Contd. of page 4)

· Cancerogenity categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

26628-22-8 | sodium azide | A4

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· Product related hazard informations:

Observe the general safety regulations when handling chemicals

The product is not subject to identification regulations pertaining to regulations on hazardous materials.

16 Other information:

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company, nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

· Department issuing MSDS: Safety & Environment Department

· Contact: Technical Service Representative