

**Material Safety Data Sheet**  
**Factor XI Deficient Plasma**
**Section 1 - Chemical Product and Company Identification**
**MSDS Name:**

Factor XI Deficient Plasma

**Catalog Numbers:**

101100, 176495, 22176495, 250458, 251100

**Synonyms:**

None.

**Company Identification:**
 Fisher Diagnostics  
 Fisher Scientific Company LLC  
 8365 Valley Pike  
 Middletown, VA 22645-0307
**Company Phone Number:**

(800) 528-0494

**Emergency Phone Number:**

(800) 528-0494

**CHEMTREC Phone Number:**

800-424-9300

**CHEMTREC (International):**

703-527-3887

**Section 2 - Composition, Information on Ingredients**

| CAS#          | Chemical Name:             | Percent | EINECS/<br>ELINCS |   |    |
|---------------|----------------------------|---------|-------------------|---|----|
| Not available | Human Plasma               | Balance | Not available     |   |    |
| Not available | Factor XI Deficient Plasma | 35.0%   | Not available     |   |    |
| 7365-45-9     | HEPES                      | 1.19%   | 230-907-9         |   |    |
| 7647-14-5     | Sodium chloride            | 0.8%    | 231-598-3         |   |    |
| 7447-41-8     | Lithium chloride           | 0.4%    | 231-212-3         |   |    |
| 9011-04-5     | Polybrene                  | 0.2%    | Not available     |   |    |
| 1310-73-2     | Sodium hydroxide           | 0.1%    | 215-185-5         | C | 35 |

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**Factor XI Deficient Plasma****Section 3 - Hazards Identification****EMERGENCY OVERVIEW**

*Appearance: white solid*

*Caution! Each unit of source material used in the preparation of this product has been tested by an FDA licensed method and found non-reactive for HBsAg and negative for antibodies to HIV and HCV. However, no known test method can offer complete assurance that products derived from human blood will not transmit hepatitis, AIDS, or other infectious diseases. This product, like all materials of human origin, should be handled as potentially infectious biological material. May cause irritation. May cause central nervous system effects.*

*Target Organs: central nervous system.*

**Potential Health Effects****Eye:**

May cause eye irritation.

**Skin:**

Prolonged and/or repeated contact may cause irritation and/or dermatitis. Product tests non-reactive for HBsAg and negative for antibodies to HIV and HCV. However, material should be handled as potentially infectious.

**Ingestion:**

May cause irritation of the digestive tract.

**Inhalation:**

Prolonged exposure may result in dizziness and general weakness.

**Chronic:**

No information found.

**Section 4 - First Aid Measures****Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:**

Get medical aid. Flush skin with plenty of soap and water.

**Ingestion:**

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

**Inhalation:**

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:**

Treat symptomatically and supportively.

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### Section 5 - Fire Fighting Measures

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:**

For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

**Autoignition Temperature:**

Not applicable.

**Explosion Limits:**

Lower: Not available. Upper: Not available.

**Flash Point:**

Not applicable.

**NFPA Rating:**

(estimated) Health: 1; Flammability: 0; Reactivity: 0

### Section 6 - Accidental Release Measures

**General Information:**

Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

In case of spill, sweep up solid or absorb liquid with inert material, then place into a biohazard container. Wear protective equipment.

### Section 7 - Handling and Storage

**Handling:**

Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

**Storage:**

Store in a cool place in the original container and protect from sunlight.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**

Good general ventilation should be sufficient to control airborne levels.

**Exposure Limits**

| Chemical Name:          | ACGIH                                    | NIOSH                                    | OSHA                                     |
|-------------------------|--|--|--|
| <b>HEPES</b>            | None of the components are on this list. | None of the components are on this list. | None of the components are on this list. |
| <b>Sodium chloride</b>  | None of the components are on this list. | None of the components are on this list. | None of the components are on this list. |
| <b>Lithium chloride</b> | None of the components are on this list. | None of the components are on this list. | None of the components are on this list. |

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|                         |  |   |  |
|-------------------------|--|---|--|
| <b>Polybrene</b>        | None of the components are on this list. | None of the components are on this list.              | None of the components are on this list. |
| <b>Sodium hydroxide</b> | 2 mg/m <sup>3</sup> Ceiling              | 10 mg/m <sup>3</sup> IDLH 2 mg/m <sup>3</sup> Ceiling | 2 mg/m <sup>3</sup> TWA                  |

#### OSHA Vacated PELs

### Personal Protective Equipment

#### Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin:

Wear appropriate protective gloves to prevent skin exposure.

#### Clothing:

Wear appropriate protective clothing to prevent skin exposure.

#### Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Color:** white

**Odor:** Odorless.

**pH:** No information found

**Vapor Pressure:** No information found

**Vapor Density:** No information found

**Evaporation Rate:** No information found

**Viscosity:** No information found

**Boiling Point:** Not available.

**Freezing/Melting Point:** No information found

**Decomposition Temperature:** No information found

**Solubility in water:** Not available.

**Specific Gravity/Density:** No information found

**Molecular Formula:** Not applicable.

**Molecular Weight:** No information found

## Section 10 - Stability and Reactivity

#### Chemical Stability:

Stable under normal temperatures and pressures.

#### Conditions to Avoid:

None reported.

#### Incompatibilities with Other Materials

None reported.

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None.

**Hazardous Polymerization**

Has not been reported

**Section 11 - Toxicological Information****RTECS:**

CAS# 7365-45-9: TL6809000.

CAS# 7647-14-5: VZ4725000.

CAS# 7447-41-8: OJ5950000.

CAS# 9011-04-5: MO1400000.

CAS# 1310-73-2: WB4900000.

**LD50/LC50:**

CAS# 7365-45-9:

No information foundCAS# 7647-14-5:

Draize test, rabbit, eye: 100 mg Mild

Draize test, rabbit, eye: 100 mg/24H Moderate

Draize test, rabbit, eye: 10 mg Moderate

Draize test, rabbit, skin: 50 mg/24H Mild

Draize test, rabbit, skin: 500 mg/24H Mild

Inhalation, rat: LC50 = >42 gm/m<sup>3</sup>/1H

Oral, mouse: LD50 = 4 gm/kg

Oral, rat: LD50 = 3000 mg/kg

Skin, rabbit: LD50 = &gt;10 gm/kg.

CAS# 7447-41-8:

Draize test, rabbit, eye: 100 mg/24H Moderate

Draize test, rabbit, skin: 500 mg/24H Severe

Oral, mouse: LD50 = 1165 mg/kg

Oral, mouse: LD50 = 1165 mg/kg

Oral, rabbit: LD50 = 800 mg/kg

Oral, rabbit: LD50 = 775 mg/kg

Oral, rat: LD50 = 526 mg/kg

Oral, rat: LD50 = 1530 mg/kg

Skin, rabbit: LD50 = 1629 mg/kg

Skin, rat: LD50 = 1488 mg/kg.

CAS# 9011-04-5:

No information foundCAS# 1310-73-2:

Draize test, rabbit, eye: 400 ug Mild

Draize test, rabbit, eye: 1% Severe

Draize test, rabbit, eye: 50 ug/24H Severe

Draize test, rabbit, eye: 1 mg/24H Severe

Draize test, rabbit, skin: 500 mg/24H Severe.

**Carcinogenicity:**

CAS# 7365-45-9: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7647-14-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7447-41-8: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 9011-04-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 1310-73-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

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**Epidemiology:**

No information found

**Teratogenicity:**

No information found

**Reproductive:**

No information found

**Mutagenicity:**

No information found

**Neurotoxicity:**

No information found

**Other:**

See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

No information found

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Part 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P Series Wastes**

None of the components are on this list.

**RCRA U Series Wastes**

None of the components are on this list.

## Section 14 - Transport Information

**US DOT**

**Proper Shipping Name:** INFECTIOUS SUBSTANCES, AFFECTING HUMANS

**Hazard Class:** 6.2

**UN Number:** UN2814

**Packing Group:**

**Canadian TDG**

No information found

## Section 15 - Regulatory Information

**US Federal**

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CAS# 7365-45-9 is listed on the TSCA Inventory.  
CAS# 7647-14-5 is listed on the TSCA Inventory.  
CAS# 7447-41-8 is listed on the TSCA Inventory.  
CAS# 9011-04-5 is not listed on the TSCA Inventory. It is for research and development use only.  
CAS# 1310-73-2 is listed on the TSCA Inventory.

**Health and Safety Reporting List**

None of the components are on this list.

**Chemical Test Rules**

None of the components are on this list.

**TSCA Section 12b**

None of the components are on this list.

**TSCA Significant New Use Rule (SNUR)**

None of the components are on this list.

**CERCLA Hazardous Substances and corresponding RQs**

CAS# 1310-73-2: 1000 lb final RQ; 454 kg final RQ

**SARA Section 302 Extremely Hazardous Substances**

None of the components are on this list.

**SARA Hazard Categories**

CAS# 7365-45-9: acute.  
CAS# 7647-14-5: acute.  
CAS# 7447-41-8: acute, chronic.  
CAS# 1310-73-2: acute, reactive.

**CERCLA/SARA Section 313**

None of the components are on this list.

**Clean Air Act - Hazardous Air Pollutants (HAPs)**

None of the components are on this list.

**Clean Air Act - Class 1 Ozone Depletors**

None of the components are on this list.

**Clean Air Act - Class 2 Ozone Depletors**

None of the components are on this list.

**Clean Water Act - Hazardous Substances**

CAS# 1310-73-2 is listed as a Hazardous Substance under the CWA.

**Clean Water Act - Priority Pollutants**

None of the components are on this list.

**Clean Water Act - Toxic Pollutants**

None of the components are on this list.

**OSHA - Highly Hazardous**

None of the components are on this list.

**US State****State Right to Know**

Sodium hydroxide can be found on the following state Right-to-Know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

**Material Safety Data Sheet**  
**Factor XI Deficient Plasma****California Regulations**

CAS# Not available: No information found  
CAS# Not available: No information found  
CAS# 7365-45-9: No information found  
CAS# 7647-14-5: No information found  
CAS# 7447-41-8: No information found  
CAS# 9011-04-5: No information found  
CAS# 1310-73-2: No information found

**European/International Regulations****European Labelling in Accordance with EC Directives:**

Hazard Symbols:  
Risk Phrases:  
Safety Phrases:

**WGK (Water Danger/Protection)**

CAS# Not available: No information found  
CAS# Not available: No information found  
CAS# 7365-45-9: No information found  
CAS# 7647-14-5: 0  
CAS# 7447-41-8: 1  
CAS# 9011-04-5: 2  
CAS# 1310-73-2: 1

**United Kingdom Occupational Exposure Limits**

No information found

**Canadian DSL/NDSL**

CAS# 7365-45-9 is listed on Canada's DSL List.  
CAS# 7647-14-5 is listed on Canada's DSL List.  
CAS# 7447-41-8 is listed on Canada's DSL List.  
CAS# 1310-73-2 is listed on Canada's DSL List.

**Canadian WHMIS Classifications**

This product does not have a WHMIS classification.

**Canadian Ingredient Disclosure List**

CAS# Not available is not listed on Canada's Ingredient Disclosure List.  
CAS# Not available is not listed on Canada's Ingredient Disclosure List.  
CAS# 7365-45-9 is not listed on Canada's Ingredient Disclosure List.  
CAS# 7647-14-5 is not listed on Canada's Ingredient Disclosure List.  
CAS# 7447-41-8 is not listed on Canada's Ingredient Disclosure List.  
CAS# 9011-04-5 is not listed on Canada's Ingredient Disclosure List.  
CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

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CAS# 1310-73-2: OEL-AUSTRALIA:TWA 2 mg/m<sup>3</sup>  
OEL-BELGIUM:STEL 2 mg/m<sup>3</sup>  
OEL-DENMARK:TWA 2 mg/m<sup>3</sup>  
OEL-FINLAND:TWA 2 mg/m<sup>3</sup>  
OEL-FRANCE:TWA 2 mg/m<sup>3</sup>  
OEL-GERMANY:TWA 2 mg/m<sup>3</sup>  
OEL-JAPAN:STEL 2 mg/m<sup>3</sup>  
OEL-THE NETHERLANDS:TWA 2 mg/m<sup>3</sup>  
OEL-THE PHILIPPINES:TWA 2 mg/m<sup>3</sup>  
OEL-SWEDEN:TWA 2 mg/m<sup>3</sup>  
OEL-SWITZERLAND:TWA 2 mg/m<sup>3</sup>;STEL 4 mg/m<sup>3</sup>  
OEL-THAILAND:TWA 2 mg/m<sup>3</sup>  
OEL-TURKEY:TWA 2 mg/m<sup>3</sup>  
OEL-UNITED KINGDOM:TWA 2 mg/m<sup>3</sup>;STEL 2 mg/m<sup>3</sup>  
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV  
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**Section 16 - Other Information**

Color information has been  
MSDS Creation Date: September 2, 1997  
Revision Date: March 16, 2007

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*