The Sedia™ HIV-1 LAg-Avidity EIA is comprised of two subunits:

Part No. 3029: Refrigerator Pack
Part No. 3030: Freezer Pack

The hazardous materials present in the kit components of each subunit will be addressed separately.

A summary of all hazardous materials is presented starting on page 6.

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### Part No. 3029: Refrigerator Pack

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3033</td>
<td>HIV-1 rIDR-M Coated Microwell Plates</td>
<td>2 Plates</td>
</tr>
<tr>
<td>3001</td>
<td>10x Wash Buffer Conc.</td>
<td>2 x 100 mL</td>
</tr>
<tr>
<td>3031</td>
<td>Sample Diluent</td>
<td>175 mL</td>
</tr>
<tr>
<td>3032</td>
<td>Dissociation Buffer</td>
<td>55 mL</td>
</tr>
<tr>
<td>3003</td>
<td>TMB Substrate</td>
<td>27 mL</td>
</tr>
<tr>
<td>3004</td>
<td>Stop Solution</td>
<td>27 mL</td>
</tr>
<tr>
<td>6039</td>
<td>Product Insert</td>
<td>1 Insert</td>
</tr>
<tr>
<td>8015</td>
<td>Plate Sealers</td>
<td>1 Pack</td>
</tr>
</tbody>
</table>

### Part No. 3030: Freezer Pack

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3037</td>
<td>Negative Control</td>
<td>100µL</td>
</tr>
<tr>
<td>3036</td>
<td>Calibrator</td>
<td>100µL</td>
</tr>
<tr>
<td>3035</td>
<td>Low Positive Control</td>
<td>100µL</td>
</tr>
<tr>
<td>3034</td>
<td>High Positive Control</td>
<td>100µL</td>
</tr>
<tr>
<td>3038</td>
<td>Goat Anti-Human IgG HRP (1000x)</td>
<td>50µL</td>
</tr>
</tbody>
</table>

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**Hazardous substances:**

I. **Albumin, Bovine, Fraction V**

CAS #: 9048-46-8

Found in: PN 3038

**Hazardous Overview:**

Bovine Serum Albumin can be a mild irritant. Avoid inhalation, contact with eyes, skin and clothing.

**Emergency and First Aid Procedures:**

- **Ingestion:** Wash mouth out with water provided person is conscious. Call a physician.
- **Dermal Exposure:** Wash exposed area with soap and copious amounts of water.
**MATERIAL SAFETY DATA SHEET**

Contact with Eyes: Flush with copious amounts of water or eyewash saline for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Inhalation: Remove to fresh air. If breathing is difficult, call a physician.

**HMIS Rating:**
- Health: 0
- Flammability: 0
- Reactivity: 0

**NFPA Rating:**
- Health: 0
- Flammability: 0
- Reactivity: 0

**Fire and Explosion Hazard Data:**
- Flash Point: N/A
- Flammability: N/A

Extinguishing Media: Suitable: Water Spray. Carbon dioxide, dry chemical power, or appropriate foam.

Unusual Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Can emit toxic fumes under fire conditions.

**Precautions of Safe Handling and Use:**
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

**II. 2-Methyl-4-Isothiazolin-3-One**

**CAS #:** 2682-20-4

**Found in:** PN 3001, PN 3031, PN 3032, PN 3034, PN 3035, PN 3036, PN 3037, PN 3038

**Percent as used in components:** Contains <0.1%

**Emergency Overview:**
In concentrated form of 9.5%, this compound is: corrosive, causes burns, and may cause sensitization by skin contact. At this very dilute formulation of <0.1% in volumes provided in this product, hazards are greatly reduced. The information presented below is for the concentrated form.

**HMIS Rating:**
- Health: 3
- Flammability: 0
- Reactivity: 0

**NFPA Rating:**
- Health: 3
- Flammability: 0
- Reactivity: 0

**Emergency and First Aid Procedures:**

**Ingestion:** Do not induce vomiting. Wash mouth out with water provided person is conscious. Call a physician.

**Dermal Exposure:** Flush with copious amounts of water. Remove contaminated clothing and shoes. Call physician if burning occurs.

**Contact with Eyes:** Flush with copious amounts of water or eyewash saline for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call physician.

**Inhalation:** Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If discomfort persists, obtain medical attention.

**Stability:**
Stable. Avoid strong oxidizing and reducing agents, amines, mercaptans.
III. 3,3',5,5'-Tetramethylbenzidine (a non-carcinogenic analog of Benzidine)
CAS #: 54827-17-7
Found in: PN 3003

Hazardous Overview:
Tetramethylbenzidine is a non-carcinogenic analog of Benzidine and has mild oxidizing agent properties. Avoid contact with skin, eyes, inhalation, and ingestion.

Fire and Explosion Hazard Data:
Flash Point: N/A
Flammable Limits: N/A
Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, or appropriate foam.
Special Procedure: None Special
Unusual Fire Fighting Procedures: None Special

Reactivity Data:
Stability: This product is stable.
Conditions to avoid: Protect from direct UV light, avoid elevated temperatures
Incompatibility: Strong oxidizing agents, metals
Hazardous Polymerization: Will not occur
Hazardous Decomposition: None Known

Health Hazard Data:
Routes of Entry: Avoid contact with skin; avoid ingestion.
Health Hazards: Toxicological properties have not been thoroughly investigated.
Signs and Symptoms of Exposure: Not known at this time.

Emergency and First Aid Procedures:
Ingestion: Induce vomiting. Wash mouth out with water provided person is conscious. Call a physician.

Dermal Exposure: Wash exposed area with soap and copious amounts of water. Remove contaminated clothing and shoes and wash before reuse.

Contact with Eyes: Flush with copious amounts of water or eyewash saline for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If discomfort persists, call a physician to obtain medical attention.

Precautions of Safe Handling and Use:
Released or Spilled Material: Cover with absorbent material provided in spill kit.
Waste Disposal Method: Normal disposal with copious amounts of water; observe all federal, state, and local environmental regulations.

IV. 1N H₂SO₄ (1N Sulfuric Acid)
CAS #: 7664-93-9
Found in: PN 3004
Concentration as used in component: 1 Normal

Hazardous Overview:
In its concentrated form, Sulfuric Acid is corrosive, reactive, and causes burns. The material provided in the Sedia™ HIV-1 LAg-Avidity EIA is significantly diluted and thus hazards are reduced. The information presented below is for the concentrated form.

HMIS Rating:
Health: 3  Flammability: 0  Reactivity: 2
MATERIAL SAFETY DATA SHEET

NFPA Rating:
Health: 3  Flammability: 0  Reactivity: 2

Emergency and First Aid Procedures:
Ingestion: Do not induce vomiting. Wash mouth out with water provided person is conscious. Call a physician.

Dermal Exposure: Flush exposed area with copious amounts of water. Remove contaminated clothing and shoes and wash before reuse. Call a physician if burning occurs.

Contact with Eyes: Flush with copious amounts of water or eyewash saline for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If discomfort persists, call a physician to obtain medical attention.

Fire and Explosion Hazard Data:
Flash Point: N/A
Flammable Limits: N/A
Extinguishing Media: Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.
Unsuitable: Do not use water.

Unusual Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Can emit toxic fumes under fire conditions.

Precautions of Safe Handling and Use:
Released or Spilled Material: Cover with dry lime or soda ash. Ventilate area and wash spill site after material pickup is complete.

V. Human Serum
CAS#: N/A
Found in: PN 3034, PN 3035, PN 3036, PN 3037

Emergency Overview:
All human serum used in the product has been determined to be free of the presence of hepatitis B and C, and has been heat inactivated to render any HIV virus not viable. However, universal precautions should always be followed when working with any body fluid. Avoid contact with skin, mouth, and eyes. Wear gloves, safety glasses, and appropriate PPE.

Emergency and First Aid Procedures:
Ingestion: Induce vomiting. Wash mouth out with water provided person is conscious. Call a physician.

Dermal Exposure: Wash exposed area with soap and copious amounts of water. Remove contaminated clothing and shoes.

Contact with Eyes: Flush with copious amounts of water or eyewash saline for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Inhalation: No fume inhalation hazard.
VI. Citrate Buffer Solution, pH 3.0

CAS #: N/A
Found in: PN 3032
Concentration as used in component: 0.1 Molar

Hazardous Overview:
Citrate Buffer is a mild corrosive.

HMIS Rating:
Health: 3  Flammability: 0  Reactivity: 0

NFPA Rating:
Health: 3  Flammability: 0  Reactivity: 0

Emergency and First Aid Procedures:
Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Dermal Exposure: In case of contact, immediately wash skin with soap and copious amounts of water. Wash contaminated clothing before reuse.

Contact with Eyes: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Fire and Explosion Hazard Data:
Flash Point: N/A
Flammable Limits: N/A
Extinguishing Media: Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.

Unusual Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Can emit toxic fumes under fire conditions.

Precautions of Safe Handling and Use:
Released or Spilled Material: Cover with dry lime or soda ash. Ventilate area and wash spill site after material pickup is complete.

VII. Bromonitrodioxane

CAS #: 30007-47-7
Found in: PN 3038
Concentration as used in component: Contains <0.01%

Hazardous Overview:
In its concentrated form, Bromonitrodioxane is toxic and an irritant. The material provided in the Sedia™ HIV-1 LAg-Avidity EIA is significantly diluted and thus hazards are reduced in the volumes provided in this product. The information presented below is for the concentrated form.

HMIS Rating:
Health: 2  Flammability: 0  Reactivity: 0

NFPA Rating:
Health: 2  Flammability: 0  Reactivity: 0
MATERIAL SAFETY DATA SHEET

Acute Toxicity:
LD₅₀ Oral – rat – 455 mg/kg
Inhalation – not determined
Dermal – not determined

Emergency and First Aid Procedures:
Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Dermal Exposure: In case of contact, immediately wash skin with soap and copious amounts of water. Wash contaminated clothing before reuse.

Contact with Eyes: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Fire and Explosion Hazard Data:
Flash Point: N/A
Flammable Limits: N/A
Extinguishing Media: Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.

Unusual Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Precautions of Safe Handling and Use:
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Summary of Hazardous Materials

<table>
<thead>
<tr>
<th>Part No. 3012</th>
<th>Refrigerator Pack</th>
<th>Hazardous Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>PN 3033</td>
<td>HIV-1 rDR-M Coated Microwell Plates</td>
<td>None</td>
</tr>
<tr>
<td>PN 3001</td>
<td>10x Wash Buffer Conc.</td>
<td>II</td>
</tr>
<tr>
<td>PN 3031</td>
<td>Sample Diluent</td>
<td>II</td>
</tr>
<tr>
<td>PN 3032</td>
<td>Dissociation Buffer</td>
<td>II, VI</td>
</tr>
<tr>
<td>PN 3003</td>
<td>TMB Substrate</td>
<td>III</td>
</tr>
<tr>
<td>PN 3004</td>
<td>Stop Solution</td>
<td>IV</td>
</tr>
<tr>
<td>PN 6039</td>
<td>Product Insert</td>
<td>None</td>
</tr>
<tr>
<td>PN 8015</td>
<td>Plate Sealers</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part No. 3013</th>
<th>Freezer Pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>PN 3037</td>
<td>Negative Control</td>
</tr>
<tr>
<td>PN 3036</td>
<td>Calibrator</td>
</tr>
<tr>
<td>PN 3035</td>
<td>Low Positive Control</td>
</tr>
<tr>
<td>PN 3034</td>
<td>High Positive Control</td>
</tr>
<tr>
<td>PN 3038</td>
<td>Goat Anti-Human IgG HRP (1000x)</td>
</tr>
</tbody>
</table>

General Notes:
• Any material/component not described in this document is not considered to be hazardous as it is currently formulated for the Incidence EIA. This is based on evaluations made by Sedia Biosciences Corporation or the Manufacturer/Supplier of the subcomponent under the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

• It is advised that appropriate Personal Protection Equipment be employed at all times during the use of the Sedia™ HIV-1 LAg-Avidity EIA. This includes the use of safety glasses or goggles, biohazard shield or hoods, lab coats or gowns, and gloves. It is also advised that GLP/GMP and proper training be followed to further minimize the risk of accident and exposure.

• Disclaimer: The information described in this document was prepared and presented with reasonable care and is based on the most reliable information available to the authors. Sedia Biosciences makes no warranty, expressed or implied, of the merchantability, fitness, accuracy, or completeness of this information.

August 10, 2016