1. Identification of Substance:

- Other means of identification: Catalog Number: CDK004
- GHS product identifier: CellXVivo Human Monocyte-derived DC Differentiation Kit
- Application of the substance / the preparation: For Research Use Only
- Manufacturer/Supplier:
  R&D Systems Inc.
  614 McKinley Place N.E.
  Minneapolis, MN 55413
  USA
  1-800-343-7475
- Emergency information: In case of a chemical emergency, spill, fire, or exposure, call R&D Systems at (612) 379-2956 or (800) 343-7475. In Europe call +44(0)1235-529449.

2. Hazards Identification:

- Classification: Regulation (EC) No. 1272/2008 [CLP/GHS]: Holo Transferrin (from human serum/plasma)
- Hazard Symbol: none
- Signal Word: none
- Hazard Statement(s): None
- Precautionary Statement(s): None
- Response:
  - Special Hazards: Potential risk of infection. Product has been donor screened for some infections agents, however as human sourced material testing cannot be guaranteed to detect all infectious agents. Treat as potentially infectious.
  - Routes of exposure: Inhalation; ingestion or skin.
    IF EXPOSED OR CONCERNED: Get medical advice/attention.
- Classification according to Directive 67/548/EEC: None
- R-phrases: None
- S-phrases: None
- Other Hazards: None

3. Information on Ingredients:

<table>
<thead>
<tr>
<th>Contains</th>
<th>EINECS</th>
<th>CAS No.</th>
<th>Content %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Holo Transferrin</td>
<td>NA</td>
<td>NA</td>
<td>&lt; 0.1%</td>
</tr>
</tbody>
</table>

4. First Aid Measures:

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly. May be irritating to skin.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Rinse mouth with water. Immediately seek medical attention and appropriate follow-up.

5. Fire Fighting Measures:

- Suitable extinguishing agents: Any means suitable for extinguishing the surrounding area.
- Specific hazards arising from the chemical: Dangerous decomposition is not anticipated.
- Protective equipment: Wear appropriate protective clothing and a self-contained breathing apparatus if necessary.

6. Accidental Release Measures:

- Person-related safety precautions: Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
Product Name: CellXVivo Human Monocyte-derived DC Differentiation Kit

- Measures for environmental protection: Prevent further spillage or leakage if safe to do so.
- Measures for containment and cleaning: Absorb liquid components with inert liquid-binding material. Pick up mechanically. Dispose contaminated material as waste according to item 13.

7. Handling and Storage:

- Precautions for safe handling: Treat as a potential biohazard. Store away from all foodstuffs. For laboratory use only.
- Information about protection against explosions and fires: Normal measures for preventive fire protection.
- Conditions for safe storage: Store in a cool place. Keep container tightly closed in a dry and well ventilated place.

8. Exposure Controls and Personal Protection:

- Components: UK. EH40 WEL- Workplace Exposure Limits: Value: Unknown
- Appropriate engineering controls: Follow usual standard laboratory practices. The following personal protection is recommended:
  - Respiratory Protection: Respiratory Protection not required. For nuisance exposures use respirators and components approved under appropriate government standards.
  - Hand Protection: Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
  - Eye Protection: Use equipment for eye protection tested and approved under appropriate government standards.
  - Skin and Body Protection: Use impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
  - Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

9. Physical and Chemical Properties:

- Appearance: Liquid
- Odor: Little to none
- Odor threshold: Not available
- pH: Not available
- Melting point/freezing point: Not available.
- Boiling point/Boiling range: Not available.
- Flash point: Not available.
- Evaporation rate: Undetermined.
- Flammability: Not available.
- Upper/lower flammability or explosive limits: Not available.
- Vapor pressure/density: Not available.
- Relative Density: Not available.
- Solubility in/Miscibility with Water: Not available.
- Partition coefficient: noctanol/water: Not available
- Auto igniting: Product is not self igniting.
- Decomposition temperature: Not available.
- Viscosity: Not available.

10. Stability and Reactivity:

- Reactivity: Not reactive
- Chemical Stability: Stable under normal ambient and storage and handling temperatures.
- Thermal: Decomposition/conditions to be avoided: No decomposition if used according to specifications.
- Incompatible materials to be avoided: Unknown
- Hazardous decomposition products: No dangerous decomposition products known.

11. Toxicological Information:

- Acute toxicity: May irritate eyes.
- Chronic Toxicity: Potential risk of infection. Product has been donor screened for some infections agents, however as human sourced material testing cannot be guaranteed to detect all infectious agents. Treat as potentially infectious.
- Routes of exposure: Inhalation; ingestion or skin.
- Skin corrosion / irritation: May be harmful if absorbed through the skin. May cause skin irritation.
- Serious eye damage / irritation: May cause eye irritation.
- Respiratory or skin sensitization: No sensitizing effects known.
- Germ cell mutagenicity: No effect known.
- Carcinogenicity: No effect known.
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- Reproductive toxicity: No toxic effect known.
- STOT-single exposure: Data not available
- STOT-repeated exposure: Data not available.
- Aspiration hazard: May be harmful if inhaled.
- Additional Information: RTECS: Not available

12. Ecological Information:

- Ecotoxicity: No data available.
- Persistence and degradability: No data available.
- Bioaccumulative potential: No data available.
- Mobility in soil: No data available.
- Other adverse effects: No data available.

13. Disposal Considerations:

- Disposal methods: Dispose of waste in accordance to applicable national, regional, or local regulations for infectious materials.
- Contaminated packaging: Dispose in the same manner as unused product.
- Special precautions: Dispose of small amounts of spilled material as potentially infectious material by autoclaving or incineration. Large spills must be dealt with separately by qualified disposal personnel.

14. Transport Information:

- UN Number: None
- DOT regulations: -Hazard class: None
- Maritime transport IMDG: Not regulated.
- Marine pollutant: No
- Air transport ICAO-TI and IATA-DGR: Not regulated.
- Transport/Additional information: Not dangerous according to the above specifications.

15. Regulations:

- US Federal and State Regulations
  - TSCA (Toxic Substances Control Act): Not listed.
  - SARA 313: Not listed.
  - SARA 311/312 Hazards: Not listed
  - CERCLA Reportable Quantity: NA
  - California Proposition 65: Not listed.

16. Other Information:

- Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability 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.