MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification
Product Name: PERFADEX®

Company Identification
XVIVO Perfusion AB
Box 53015
Mässans gata 10
SE-40014 Göteborg
Sweden
+46 31 788 21 50 (For product information)
+46 31 788 21 50 (For emergencies)

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT LISTING:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Amount</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiological salt solution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dextran 40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(See Section 8 for exposure guidelines)
(See Section 15 for regulatory information)

COMPOSITION COMMENT:
Physiological salt solution containing Dextran 40. For organ perfusion and preservation.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYE:
No known effects

SKIN:
No known effects
INHALATION:  
No known effects

INGESTION:  
No known effects

CHRONIC EFFECTS:  
No known effects

SUBCHRONIC EFFECTS:  
No known effects

REPRODUCTIVE HAZARDS:  
No known effects

CARCIOGENICITY INFORMATION:  
No known effects

MISCELLANEOUS:  
Causes a slippery surface when spilled. Dextran is classified as food additive in EU and USA.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:  
After initial flushing, remove any contact lenses and continue flushing.

SKIN CONTACT FIRST AID:  
Not toxic. Rinse with water.

INHALATION FIRST AID:  
No specific treatment is necessary since this material is not likely to be hazardous by inhalation.

INGESTION FIRST AID:  
None. Non toxic.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:
COC Flash Point: Perfadex is not flammable
Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR:
LEL: N/A
UEL: N/A

EXTINGISHING MEDIA:
Will not burn.

FIRE & EXPLOSION HAZARDS:
Material will not burn.

6. ACCIDENTAL RELEASE MEASURES
SAFEGUARDS (PERSONNEL):
Absorb liquid, clean and dry area to prevent slipping.

7. HANDLING AND STORAGE
RECOMMENDED STORAGE TEMPERATURE:
Storage recommendation - “Store below 30°C. Do not freeze”.

HANDLING (PERSONNEL):
Use care in handling /storage.

HANDLING (PHYSICAL ASPECTS):
Keep from freezing. Single use only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
ENGINEERING CONTROLS:
No special ventilation requirements.

EYE/FACE PROTECTION REQUIREMENTS:
None.

SKIN PROTECTION REQUIREMENTS:
None.

RESPIRATORY PROTECTION REQUIREMENTS:
None.

**MISCELLANEOUS:**
None.

**EXPOSURE GUIDELINES:**
No information available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FORM:</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>COLOR:</strong></td>
<td>Colorless</td>
</tr>
<tr>
<td><strong>ODOR:</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>SOLUBILITY IN WATER:</strong></td>
<td>Complete</td>
</tr>
</tbody>
</table>

**10. STABILITY AND REACTIVITY**

**STABILITY:**
Stable.

**11. TOXICOLOGICAL INFORMATION**

No information available

**12. ECOLOGICAL INFORMATION**

No information available

**13. DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL:**
Flush with water.
Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**14. TRANSPORTATION INFORMATION**

**PRODUCT LABEL:** PERFADEX
**D.O.T. HAZARD CLASS:** Non-Hazardous

**15. REGULATORY INFORMATION**
Perfadex is approved as a Medical Device in Australia, Canada, China, EU, Israel and US (FDA).
Perfadex is approved as a pharmaceutical product in Sweden, Germany, Austria and Iran.

16. OTHER INFORMATION

REASON FOR ISSUE: Official
PREPARED BY: Maria Sipos
APPROVED BY: Alf Malmberg
TITLE: QA/QC Manager
APPROVAL DATE: 2013-02-05
SUPERCEDES DATE: 2007-02-09

ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein.

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END OF MSDS