

# MATERIAL SAFETY DATA SHEET

FertiPro N.V.- Belgium

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name : VitriFreeze ES – VitriThaw ES  
 Product use : Medium for vitrifying early stage human embryos (for professional use only)  
 Distributor : FertiPro N.V.  
 Industriepark Noord 32  
 B-8730 Beernem  
 Belgium  
 For emergency information : 32 50 79 18 05

## 2. HAZARD IDENTIFICATION

DMSO : Irritating to eyes, respiratory system and skin  
 Ethylene glycol : Harmful if swallowed

## 3. COMPOSITION / INFORMATION ON THE COMPONENTS

Product components:	Component	CAS-code	Approx. %
<b>PBS buffer (Pre-inc/T4)</b>	Water	7732-18-5	> 90%
	NaCl	7647-14-5	< 1%
	KCl	7447-40-7	< 1%
	KH <sub>2</sub> PO <sub>4</sub>	7778-77-0	< 1%
	Na <sub>2</sub> HPO <sub>4</sub> ·2H <sub>2</sub> O	10028-24-7	< 1%
	Human serum albumin	70024-90-7	2 %
<b>VitriFreeze 1</b>	PBS buffer	-	90%
	DMSO	67-68-5	5%
	Ethylene glycol	107-21-1	5%
<b>VitriFreeze 2</b>	PBS buffer	-	80%
	DMSO	67-68-5	10%
	Ethylene glycol	107-21-1	10%
<b>VitriFreeze 3</b>	PBS buffer	-	> 40%
	DMSO	67-68-5	20%
	Ethylene glycol	107-21-1	20%
	Sucrose	57-50-1	< 15%
	Ficoll	26873-85-8	< 2%
<b>VitriThaw 1/2/3/4</b>	PBS buffer	-	> 75%
	Sucrose	57-50-1	< 25%

VitriFreeze/Thaw ES media do not contain any raw materials of direct animal-origin or materials that have been produced using animal-origin components. Components have not been in contact with material of animal origin during processing and therefore pose no TSE risk.

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#### 4. FIRST AID MEASURES

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Inhalation	:	Remove to fresh air. If breathing is difficult, give oxygen.
Eyes	:	Immediately flush eyes with copious amounts of water
Skin	:	Immediately wash skin with soap and copious amounts of water
Ingestion	:	Wash out mouth with water provided person is conscious. Call a physician.

*Obtain medical attention if any discomfort should occur.*

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#### 5. FIRE FIGHTING MEASURES

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Extinguishing media	:	Not applicable
Special exposure hazards	:	Not applicable
Special fire fighting procedure	:	Not applicable
Unusual fire and explosion hazards	:	Not applicable

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#### 6. ACCIDENTAL RELEASE MEASURES

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Personal precautions	:	Wear chemical safety goggles. Wear rubber gloves. avoid contact with skin, eyes and clothing
Environmental precautions	:	Not applicable
Methods for cleaning up	:	Rinse spill area with water. Dispose with laboratory waste

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#### 7. HANDLING AND STORAGE

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Handling	:	See heading 8.
Storage	:	Store at 2-8°C. Do not freeze before use. Keep away from sunlight. After opening the container, do not use the product longer than 7 days. Do not use after expiry date.
Specific use	:	See instructions for use delivered with the device.

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#### 8. EXPOSURE CONTROL / PERSONAL PROTECTION

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Exposure limit values	:	Not applicable
(Occupational) exposure controls	:	Wear chemical safety goggles. Wear rubber gloves. Avoid contact with skin, eyes and clothing. Avoid inhalation. Avoid mouth pipetting
Environmental exposure controls	:	Not applicable

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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance and odour	:	White/yellow transparent liquid, odourless
Solubility in water	:	Complete

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#### 10. STABILITY AND REACTIVITY

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Stability	:	Stable
Conditions to avoid	:	None known
Materials to avoid	:	None known
Hazardous decomposition products	:	None

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## 11. TOXICOLOGICAL INFORMATION

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DMSO	:	Causes skin irritation. May be harmful by inhalation, ingestion or skin absorption. Vapour or mist is irritating to the eyes, mucous membranes and upper respiratory tract. Readily absorbed through skin. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated
Human serum albumin	:	The plasma manufactured by Talecris (Grifols) which is the source for the human serum albumin is tested for anti-HIV 1, anti-HIV 2, anti-HCV and HbsAG. The albumin agrees with all the requirements set forth by the European and United States health authority regarding safety
Ethylene glycol	:	When ingested symptoms mimic alcohol inebriation and are followed by nausea, vomiting, abdominal pain, weakness, muscle tenderness, respiratory failure, convulsions, cardiovascular collapse, pulmonary oedema, hypocalcemic tetany, and severe metabolic acidosis. Without treatment, death may occur in 8 to 24 hours. Victims who survive initial toxicity period usually develop renal failure along with brain and liver damage. Exposure to and/or consumption of alcohol may increase toxic effects

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## 12. ECOLOGICAL INFORMATION

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No known ecological damage.

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## 13. DISPOSAL

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Dispose with laboratory waste.

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## 14. TRANSPORT INFORMATION

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Not classified as Hazardous for Transport.

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## 15. REGULATORY INFORMATION

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This product does not contain any ingredients which have been determined to be health hazards pursuant to U.S. OSHA regulations, and which comprise 1% or more (0.1% for carcinogens) of the mixture.

Information shown on the labels	:	Name of the medium. Volume. Reference number. Lot number. Expiry date. Temperature limitation: 2-8°C. Keep away from sunlight. Read instructions for use. Sterilized by aseptic filtration. Name and address of manufacturer. Label version number.
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## 16. OTHER INFORMATION

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The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must take independent determinations of the suitability and completeness of information from all other sources to assure proper use and disposal of these materials and the safety and health of employees and customers. FertiPro N.V. shall not be held liable for any damage resulting from handling or from contact with its products.