

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product form : Mixture  
 Product name : VitriStore Freeze Kit  
 (VitriStore Pre-Incubation Medium  
 VitriStore Freeze Medium 1  
 VitriStore Freeze Medium 2)  
 Product code : 4 VF\_KIT1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1 Relevant identified uses

Industrial/Professional use spec : For professional use only.  
 Use of the substance/mixture : Cell culture medium for the vitrification of human embryos.

#### 1.2.2 Uses advised against

No additional information available.

### 1.3 Details of the supplier of the material safety data sheet

Gynemed GmbH & Co. KG  
 Lübecker Straße 9  
 D-23738 Lensahn  
 Germany  
 info@gynemed.de

### 1.4 Emergency telephone number

Emergency number : +49 (0)4363 90 32 90

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]  
 Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC  
 Not classified

Adverse physicochemical, human health and environmental effects  
 No additional information available.

### 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]  
 EUH phrases: EUH210 – Safety data sheet available on request.

### 2.3 Other hazards

No additional information available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substance

Not applicable

### 3.2 Mixture

#### VitriStore Pre-Incubation Medium

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
<b>Ultrapure water</b>	(CAS No) 7732-18-5 (EC No) 231-791-2	90 - 99	Not classified
<b>Human Serum Albumin</b>	(CAS No) 70024-90-7	1 - 5	Not classified
<b>Sodium Chloride</b>	(CAS No) 7647-14-5 (EC No) 231-598-3	0,1 - 1	Not classified
<b>Disodium Phosphate Dihydrate</b>	(CAS No) 10028-24-7	0,1 - 1	Not classified
<b>Potassium Chloride</b>	(CAS No) 7447-40-7 (EC No) 231-211-8	< 0,1	Not classified
<b>Potassium Dihydrogen Phosphate</b>	(CAS No) 7778-77-0 (EC No) 231-913-4	< 0,1	Not classified

Full text of R- and H-phrases: see section 16

Comments : The 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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
processing and therefore pose no TSE risk.			

#### VitriStore Freeze Medium 1

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
<b>Ultrapure water</b>	(CAS No) 7732-18-5 (EC No) 231-791-2	70 - 90	Not classified
<b>Dimethyl sulphoxide (DMSO)</b>	(CAS No) 67-68-5	10	Not classified
<b>Ethylene Glycol</b>	(CAS No) 107-21-1 (EC No) 203-473-3 (EC Index No) 603-027-00-1	10	Acute Tox. 4 (Oral), H302
<b>Human Serum Albumin</b>	(CAS No) 70024-90-7	1 - 5	Not classified
<b>Sodium Chloride</b>	(CAS No) 7647-14-5 (EC No) 231-598-3	0,1 - 1	Not classified
<b>Disodium Phosphate Dihydrate</b>	(CAS No) 10028-24-7	< 0,1	Not classified
<b>Potassium Chloride</b>	(CAS No) 7447-40-7 (EC No) 231-211-8	< 0,1	Not classified
<b>Potassium Dihydrogen Phosphate</b>	(CAS No) 7778-77-0 (EC No) 231-913-4	< 0,1	Not classified

Full text of R- and H-phrases: see section 16

Comments	:	The 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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#### VitriStore Freeze Medium 2

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
<b>Ultrapure water</b>	(CAS No) 7732-18-5 (EC No) 231-791-2	50 - 70	Not classified
<b>Sucrose</b>	(CAS No) 57-50-1 (EC No) 200-334-10	20 - 30	Not classified
<b>Dimethyl sulphoxide (DMSO)</b>	(CAS No) 67-68-5	15 - 20	Not classified
<b>Ethylene Glycol</b>	(CAS No) 107-21-1 (EC No) 203-473-3 (EC Index No) 603-027-00-1	15 - 20	Acute Tox. 4 (Oral), H302
<b>Human Serum Albumin</b>	(CAS No) 70024-90-7	1 - 5	Not classified
<b>Ficoll</b>	(CAS No) 26873-85-8	0,1 - 1	Not classified
<b>Sodium Chloride</b>	(CAS No) 7647-14-5 (EC No) 231-598-3	0,1 - 1	Not classified
<b>Disodium Phosphate Dihydrate</b>	(CAS No) 10028-24-7	< 0,1	Not classified
<b>Potassium Chloride</b>	(CAS No) 7447-40-7 (EC No) 231-211-8	< 0,1	Not classified
<b>Potassium Dihydrogen Phosphate</b>	(CAS No) 7778-77-0 (EC No) 231-913-4	< 0,1	Not classified

Full text of R- and H-phrases: see section 16

Comments	:	The 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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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

- advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2 Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No additional information available.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2 Special hazards arising from the substance or mixture

No additional information available.

#### 5.3 Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

##### 6.1.1 For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2 For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2 Environmental precautions

Prevent entry to sewers and public waters.

#### 6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Collect spillage. Store away from other materials.

#### 6.4 Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

#### 7.2 Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use.  
 Keep only in the original container away from direct (sun)light.  
 Do not freeze.  
 Do not use after expiry date.  
 After opening the container, the product can be safely used up to 7 days when sterile conditions are maintained and the products are stored at 2 - 8 °C.  
 Content cannot be resterilized after opening.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct (sun)light.
- Storage temperature : 2 - 8°C

#### 7.3 Specific end use(s)

See instruction for use delivered with the device.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

No additional information available.

#### 8.2 Exposure controls

- Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety. Avoid all unnecessary exposure.
- Personal protective equipment : Wear fire/flame resistant/retardant clothing
- Skin Protection : Complete suit protecting against chemicals, flame retardant atistic protective clothing.

Hand protection		The type of protection must be selected according to the concentration and volume of the dangerous substance at the specific workplace. Wear protective gloves. Gloves must be inspected prior to use. Use proper glove removal technique (Without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to meet the specifications of EU-directive 89/686/EEC and the standard EN374 derived from it.
Eye/Face protection	:	Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Respiratory protection	:	Wear appropriate mask. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator
Other information	:	Do not eat, drink or smoke during use. Do not pipette liquid using a mouth pipette.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Clear, colorless liquid
Odour	:	Odourless
Odour threshold	:	No data available
pH	:	7,20 - 7,40
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable
Vapour pressure	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	Highly soluble in water. Water: complete
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

### 9.2 Other information

No additional information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No additional information available.

### 10.2 Chemical stability

Stable after transport (max. 5 days) at elevated temperature ( $\leq 37^{\circ}$  C). Stable for 12 months from date of manufacture.

### 10.3 Possibility of hazardous reactions

Not established.

### 10.4 Conditions to avoid

Direct (sun)light. Extremely high or low temperatures.

### 10.5 Incompatible materials

Strong acids. Strong bases.

### 10.6 Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity	:	Not classified. Extensive data from Mouse Embryo Assay have demonstrated that the medium is not toxic.
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified

Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.
Other information	:	Human Serum Albumin: The plasma which is the source of the human serum albumin is tested for antibodies to HIV and HCV and non-reactive for HbsAg, HBV RNA, HCV RNA, HIV-1 RNA and syphilis. The albumin agrees with all the requirements set forth by the European and United States health authority regarding safety. Route of exposure: Under normal conditions there is no exposure to the product.

## SECTION 12: Ecological information

### 12.1 Toxicity

No additional information available

### 12.2 Persistence and degradability

Persistence and degradability : Not established

### 12.3 Bioaccumulative potential

Bioaccumulative potential : Not established

### 12.4 Mobility in soil

No additional information available

### 12.5 Results of PBT and vPvB assessment

No additional information available

### 12.6 Other adverse effects

Avoid release to environment

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
 Ecology – waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1 UN number

Not regulated for transport

### 14.2 UN proper shipping name

Proper Shipping Name (ADR) : Not applicable  
 Proper Shipping Name (IMDG) : Not applicable  
 Proper Shipping Name (IATA) : Not applicable  
 Proper Shipping Name (ADN) : Not applicable  
 Proper Shipping Name (RID) : Not applicable

### 14.3 Transport hazard class(es)

Transport hazard class(es) (ADR) : Not applicable  
 Transport hazard class(es) (IMDG) : Not applicable  
 Transport hazard class(es) (IATA) : Not applicable  
 Transport hazard class(es) (ADN) : Not applicable  
 Transport hazard class(es) (RID) : Not applicable

### 14.4 Packing group

Packing group (ADR) : Not applicable  
 Packing group (IMDG) : Not applicable  
 Packing group (IATA) : Not applicable  
 Packing group (ADN) : Not applicable  
 Packing group (RID) : Not applicable

### 14.5 Environmental hazards

Dangerous for the environment : No  
 Marine pollutant : No  
 Other information : No supplementary information available

### 14.6 Special precautions for user

Not applicable

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1 EU-Regulations

No REACH Annex XVII restrictions.  
 Contains no REACH candidate substance.

#### 15.1.2 National regulations

No additional information available.

### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

Data sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None

Full text of R-, H- and EUH-phrases

Acute Tox. 4 Acute toxicity (oral), Category 4  
 H302 Harmful if swallowed

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.