

Safety Data Sheet according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 25/08/2022 Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze

Freezing 2: page 15>21

VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42

Version: D.2

// VitriThaw Thawing 4: page 43>49

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

# **Product identifier**

Product form : Mixture

Product name : VitriFreeze - Pre-incubation medium

Product code VPI005

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

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only

Use of the substance/mixture : VitriFreeze™ and VitriThaw™ are a set of media for vitrification and thawing of human embryos

(morula till expanded blastocyst stage).

#### 1.2.2. Uses advised against

No additional information available

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

FertiPro NV Industriepark Noord 32 8730 Beernem Belgium

info@fertipro.com

#### **Emergency telephone number**

Emergency number : +3250791805

### **SECTION 2: Hazards identification**

### Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

# Adverse physicochemical, human health and environmental effects

No additional information available

### **Label elements**

## Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

### Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### **SECTION 3: Composition/information on ingredients**

### **Substance**

Not applicable

#### 3.2 **Mixture**

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

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium Dihydrogen Phosphate	(CAS No) 7778-77-0 (EC no) 231-913-4	< 0,1	Not classified

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.

### **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. Notify authorities if liquid enters sewers or public waters.

vapour.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills as soon as possible. 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

# 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. Cannot be re-sterlized after opening.

25/08/2022 EN (English) ID: FP09 I46 R02 2/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

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 instructions for use delivered with the device.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

# 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety. Avoid all unnecessary exposure.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear fire/flame resistant/retardant clothing.

## Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

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).

### 8.2.2.2. Skin protection

Hand protection

: 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.

Skin protection:

: Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protection must be selected according to the concentration and volume of the dangerous substance at the specific workplace.

#### 8.2.2.3. Respiratory protection

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 is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 8.2.2.4. Thermal hazards

No additional information available

25/08/2022 EN (English) ID: FP09 I46 R02 3/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

### 8.2.3. Environmental exposure controls

#### 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. Not available Odour threshold : Not available Melting point Freezing point : Not available Boiling point Not available Flammability Non flammable. **Explosive limits** Not available Lower explosion limit : Not available Upper explosion limit : Not available : Not available Flash point : Not available Auto-ignition temperature Decomposition temperature : Not available 7,2 - 7,4 Ηа

Solubility : highly soluble in water. Water: complete

: Not available

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density : Not available Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

### 9.2. Other information

Viscosity, kinematic

### 9.2.1. Information with regard to physical hazard classes

No additional information available

## 9.2.2. Other safety characteristics

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 (≤ 37°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. Fume.

### **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral, dermal, inhalation) : Not classified. Extensive data from Mouse Embryo Assays have demonstrated that the medium is not toxic.

25/08/2022 EN (English) ID: FP09 I46 R02 4/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Skin corrosion/irritation : Not classified

Additional information Based on available data, the classification criteria are not met

Serious eve damage/irritation Not classified

Based on available data, the classification criteria are not met Additional information

Respiratory or skin sensitisation : Not classified

Additional information Based on available data, the classification criteria are not met

Germ cell mutagenicity Not classified

Additional information Based on available data, the classification criteria are not met

Carcinogenicity Not classified

Based on available data, the classification criteria are not met Additional information

Reproductive toxicity : Not classified

Additional information Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) Not classified

Additional information Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated

exposure)

Aspiration hazard

: Not classified

Additional information : Based on available data, the classification criteria are not met

: Not classified Additional information : Based on available data, the classification criteria are not met

#### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Potential adverse human health effects and

symptoms

Other information

: Based on available data, the classification criteria are not met

: Human Albumin Solution: 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**

Hazardous to the aquatic environment, short-term : Not classified

(acute)

Hazardous to the aquatic environment, long-term Not classified

(chronic)

#### 12.2. Persistence and degradability

VitriFreeze - Pre-incubation medium		
Persistence and degradability Not established.		
Sodium Chloride (7647-14-5)		
Persistence and degradability	Not established.	

# Rioaccumulative notential

12.3. Dioaccumulative potential		
VitriFreeze - Pre-incubation medium		
Bioaccumulative potential	Not established.	
Sodium Chloride (7647-14-5)		
Bioaccumulative potential	Not established.	

### Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. **Endocrine disrupting properties**

No additional information available

#### 12.7. Other adverse effects

Avoid release to the environment

ID: FP09 I46 R02 25/08/2022 EN (English) 5/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# **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

UN-No. (ADR) / (IMDG) / (IATA) / (ADN) / (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) / (IMDG) / (IATA) : Not applicable

/ (ADN) / (RID)

14.3. Transport hazard class(es)

Transport hazard class(es) (ADR) / (IMDG) / : Not applicable

(IATA) / (ADN) / (RID)

14.4. Packing group

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

(RID)

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

#### Overland transport / Transport by sea / Air transport / Inland waterway transport / Rail transport

No data available

### 14.7. Maritime transport in bulk according to IMO instruments

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

Contains no REACH substances with Annex XVII restrictions

Contains no REACH Annex XIV substances

Contains no substance on the REACH candidate list

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

#### 15.1.2. National regulations

### France

Occupational diseases	
Code	Description
RG 67	Nasal septum lesions caused by potassium chloride dust in potash mines and their dependencies

### Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

## Netherlands

SZW list of carcinogenic substances : None of the components are listed SZW list of mutagenic substances : None of the components are listed

25/08/2022 EN (English) ID: FP09 I46 R02 6/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

NON-limitative list of substances toxic for

reproduction - Breast-feeding

: None of the components are listed

NON-limitative list of substances toxic for

reproduction - Fertility

: None of the components are listed

NON-limitative list of substances toxic for

reproduction - Development

: None of the components are listed

**Switzerland** 

Storage class (LK) : LK 10/12 - Liquids

#### 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, labelling 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.

Safety Data Sheet (SDS), EU

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

25/08/2022 EN (English) ID: FP09 I46 R02 7/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

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

#### 1.1. Product identifier

Product form : Mixture

Product name : VitriFreeze - Freezing 1

Product code : VF1001

#### 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 : VitriFreeze™ and VitriThaw™ are a set of media for vitrification and thawing of human embryos

(morula till expanded blastocyst stage).

#### 1.2.2. Uses advised against

No additional information available

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

FertiPro NV Industriepark Noord 32 8730 Beernem Belgium

info@fertipro.com

#### 1.4. Emergency telephone number

Emergency number : +3250791805

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

# **SECTION 3: Composition/information on ingredients**

## 3.1. Substance

Not applicable

#### 3.2. Mixture

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

25/08/2022 EN (English) ID: FP09 I46 R02 8/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Full text of 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.

### **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. Notify authorities if liquid enters sewers or public waters.

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

Methods for cleaning up : Soak up spills as soon as possible. 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.

Cannot be re-sterlized after opening.

25/08/2022 EN (English) ID: FP09 I46 R02 9/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

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 instructions for use delivered with the device.

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

# 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety. Avoid all unnecessary exposure.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear fire/flame resistant/retardant clothing.

### Personal protective equipment symbol(s):



### 8.2.2.1. Eye and face protection

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).

### 8.2.2.2. Skin protection

Hand protection : 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.

Skin protection: : Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protection must be selected according to the concentration and volume of the dangerous

substance at the specific workplace.

### 8.2.2.3. Respiratory protection

Respiratory protection : Wear appropriate mask. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (LIS) or type AREK (EN 14387)

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 is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 8.2.2.4. Thermal hazards

No additional information available

# 8.2.3. Environmental exposure controls

# Other information:

Do not eat, drink or smoke during use. Do not pipette liquid using a mouth pipette.

25/08/2022 EN (English) ID: FP09 I46 R02 10/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# **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 Not available Not available Melting point Freezing point Not available Boiling point Not available Non flammable. Flammability Explosive limits Not available Not available Lower explosion limit Upper explosion limit : Not available Flash point : Not available Not available Auto-ignition temperature : Not available Decomposition temperature 7.2 - 7.4

Viscosity, kinematic : Not available
Solubility : highly soluble in water. Water: complete

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density : Not available Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

#### 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

### 9.2.2. Other safety characteristics

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 (≤ 37°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. Fume.

### **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral, dermal, inhalation) : Not classified. Extensive data from Mouse Embryo Assays have demonstrated that the medium

is not toxic.

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified

25/08/2022 EN (English) ID: FP09 I46 R02 11/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity Not classified

Additional information Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

: Based on available data, the classification criteria are not met Additional information

Specific target organ toxicity (repeated : Not classified

exposure)

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Potential adverse human health effects and

symptoms

Other information

: Based on available data, the classification criteria are not met

Human Albumin Solution: 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**

### **Toxicity**

Hazardous to the aquatic environment, short-term : Not classified

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

#### 12.2. Persistence and degradability

VitriFreeze – Freezing 1		
Persistence and degradability	Not established.	
Sodium Chloride (7647-14-5)		
Persistence and degradability	Not established.	

#### 12.3. **Bioaccumulative potential**

vitriFreeze – Freezing i	
Bioaccumulative potential	Not established.

Sodium Chloride (7647-14-5) Not established.

# Bioaccumulative potential

**Mobility in soil** No additional information available

### Results of PBT and vPvB assessment

No additional information available

#### **Endocrine disrupting properties**

No additional information available

#### Other adverse effects

Avoid release to the environment

### **SECTION 13: Disposal considerations**

### 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.

ID: FP09 I46 R02 25/08/2022 EN (English) 12/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# **SECTION 14: Transport information**

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

#### 14.1. UN number

UN-No. (ADR) / (IMDG) / (IATA) / (ADN) / (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) / (IMDG) / (IATA)/ : Not applicable

(ADN) / (RID)

14.3. Transport hazard class(es)

Transport hazard class(es) (ADR) / (IMDG) / : Not applicable

(IATA) / (ADN) / (RID)

14.4. Packing group

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

(RID)

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

### Overland transport / Transport by sea / Air transport / Inland waterway transport / Rail transport

No data available

#### 14.7. Maritime transport in bulk according to IMO instruments

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

Contains no REACH substances with Annex XVII restrictions

Contains no REACH Annex XIV substances

Contains no substance on the REACH candidate list

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances

## 15.1.2. National regulations

#### France

Occupational diseases		
Code	Description	
RG 67	Nasal septum lesions caused by potassium chloride dust in potash mines and their dependencies	
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide	

### Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

**Netherlands** 

SZW list of carcinogenic substances : None of the components are listed SZW list of mutagenic substances : None of the components are listed

25/08/2022 EN (English) ID: FP09 I46 R02 13/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

NON-limitative list of substances toxic for

reproduction - Breast-feeding

: None of the components are listed

NON-limitative list of substances toxic for

reproduction - Fertility

: None of the components are listed

NON-limitative list of substances toxic for

reproduction - Development

: None of the components are listed

**Switzerland** 

Storage class (LK) : LK 10/12 - Liquids

#### 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, labelling 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 H- and EUH-phrases:

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

#### Safety Data Sheet (SDS), EU

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

25/08/2022 EN (English) ID: FP09 I46 R02 14/49



# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Revision date: 25/08/2022 Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze

Freezing 2: page 15>21

VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42

Version: D.2

// VitriThaw Thawing 4: page 43>49

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

### **Product identifier**

Product form : Mixture

Product name : VitriFreeze - Freezing 2

: VF2001 Product code

#### 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 : VitriFreeze™ and VitriThaw™ are a set of media for vitrification and thawing of human embryos

(morula till expanded blastocyst stage).

#### Uses advised against

No additional information available

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

FertiPro NV Industriepark Noord 32

8730 Beernem

Belgium info@fertipro.com

### **Emergency telephone number**

**Emergency number** : +3250791805

### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

# Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Adverse physicochemical, human health and environmental effects

No additional information available

### Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

**EUH** phrases : EUH210 - Safety data sheet available on request

#### Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

# **SECTION 3: Composition/information on ingredients**

### **Substance**

Not applicable

#### 3.2. **Mixture**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ultrapure water	(CAS No) 7732-18-5 (EC no) 231-791-2	50 - 70	Not classified
Sucrose	(CAS No) 57-50-1 (EC no) 200-334-9	20 - 30	Not classified
Dimethyl sulphoxide (DMSO)	(CAS No) 67-68-5	15 - 20	Not classified
Ethylene glycol	(CAS No) 107-21-1 (EC no) 203-473-3 (EC index no) 603-027-00-1	15 - 20	Acute Tox. 4 (Oral), H302
Human serum albumin	(CAS No) 70024-90-7	1 - 5	Not classified
FicoII	(CAS No) 26873-85-8	0,1 - 1	Not classified
Sodium Chloride	(CAS No) 7647-14-5 (EC no) 231-598-3	0,1 - 1	Not classified

ID: FP09 I46 R02 25/08/2022 15/49 EN (English)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Disodium Phosphate Dihydrate	(CAS No) 10028-24-7	< 0,1	Not classified
Potassium Chloride	(CAS No) 7447-40-7 (EC no) 231-211-8	< 0,1	Not classified
Potassium Dihydrogen Phosphate	(CAS No) 7778-77-0 (EC no) 231-913-4	< 0,1	Not classified

Full text of 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.

# **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. Notify authorities if liquid enters sewers or public waters.

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

Methods for cleaning up : Soak up spills as soon as possible. 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.

25/08/2022 EN (English) ID: FP09 I46 R02 16/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

#### 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. Cannot be re-sterlized 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 instructions for use delivered with the device.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety. Avoid all unnecessary exposure.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear fire/flame resistant/retardant clothing.

### Personal protective equipment symbol(s):



### 8.2.2.1. Eye and face protection

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).

### 8.2.2.2. Skin protection

Hand protection

: 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.

Skin protection:

: Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protection must be selected according to the concentration and volume of the dangerous substance at the specific workplace.

#### 8.2.2.3. Respiratory protection

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 is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

25/08/2022 EN (English) ID: FP09 I46 R02 17/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### 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 : Not available : Not available Melting point : Not available Freezing point Boiling point Not available : Non flammable. Flammability **Explosive limits** : Not available Lower explosion limit : Not available Not available Upper explosion limit Flash point Not available Auto-ignition temperature : Not available : Not available Decomposition temperature : 7,2 - 7,4 pΗ Viscosity, kinematic : Not available

Solubility : highly soluble in water. Water: complete

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density : Not available Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

### 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

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 (≤ 37°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. Fume.

25/08/2022 EN (English) ID: FP09 I46 R02 18/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral, dermal, inhalation) : Not classified. Extensive data from Mouse Embryo Assays have demonstrated that the medium

is not toxic

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated

exposure)

Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

### 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

No additional information available

### 11.2.2. Other information

Potential adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met

Other information

Human Albumin Solution: 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

Hazardous to the aquatic environment, short-term

: Not classified

(acute)

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

### 12.2. Persistence and degradability

	VitriFreeze – Freezing 2	
	Persistence and degradability	Not established.
Sodium Chloride (7647-14-5)		
	Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

VitriFreeze – Freezing 2	
Bioaccumulative potential	Not established.
Sodium Chloride (7647-14-5)	
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. Endocrine disrupting properties

No additional information available

25/08/2022 EN (English) ID: FP09 I46 R02 19/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

#### 12.7. Other adverse effects

Avoid release to the 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

UN-No. (ADR) / (IMDG) / (IATA) / (ADN) / (RID) : Not applicable

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) / (IMDG) / (IATA) : Not applicable

/ (ADN) / (RID)

#### 14.3. Transport hazard class(es)

Transport hazard class(es) (ADR) / (IMDG) / : Not applicable

(IATA) / (ADN) / (RID)

#### 14.4. Packing group

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

(RID)

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

#### 14.6. Special precautions for user

### Overland transport / Transport by sea / Air transport / Inland waterway transport / Rail transport

No data available

# 14.7. Maritime transport in bulk according to IMO instruments

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

Contains no REACH substances with Annex XVII restrictions

Contains no REACH Annex XIV substances

Contains no substance on the REACH candidate list

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

25/08/2022 EN (English) ID: FP09 I46 R02 20/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

## 15.1.2. National regulations

#### **France**

Occupational diseases	
Code Description	
RG 67 Nasal septum lesions caused by potassium chloride dust in potash mines and their dependencies	
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

#### Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

#### **Netherlands**

SZW list of carcinogenic substances : None of the components are listed SZW list of mutagenic substances : None of the components are listed NON-limitative list of substances toxic for reproduction - Breast-feeding

NON-limitative list of substances toxic for

reproduction - Fertility

NON-limitative list of substances toxic for

reproduction - Development

: None of the components are listed

: None of the components are listed

### **Switzerland**

Storage class (LK) : LK 10/12 - Liquids

### 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, labelling 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 H- and EUH-phrases:

Tall text of TT and EoT philaded.		
	Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
	H302	Harmful if swallowed

Safety Data Sheet (SDS), EU

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

25/08/2022 EN (English) ID: FP09 I46 R02 21/49



# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ID: FP09 I46 R02 Revision date: 25/08/2022

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze

Freezing 2: page 15>21

VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42

Version: D.2

// VitriThaw Thawing 4: page 43>49

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

#### **Product identifier**

Product form : Mixture

Product name : VitriThaw - Thawing 1

Product code : VT1005

#### 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 : VitriFreeze™ and VitriThaw™ are a set of media for vitrification and thawing of human embryos

(morula till expanded blastocyst stage).

#### 1.2.2. Uses advised against

No additional information available

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

FertiPro NV Industriepark Noord 32 8730 Beernem Belgium info@fertipro.com

#### **Emergency telephone number**

: +3250791805 **Emergency number** 

### **SECTION 2: Hazards identification**

### Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

### Adverse physicochemical, human health and environmental effects

No additional information available

### Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

# **SECTION 3: Composition/information on ingredients**

#### 3.1. **Substance**

Not applicable

#### 3.2. **Mixture**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ultrapure water	(CAS No) 7732-18-5 (EC no) 231-791-2	70 - 90	Not classified
Sucrose	(CAS No) 57-50-1 (EC no) 200-334-9	10 - 20	Not classified
Human serum albumin	(CAS No) 70024-90-7	1 - 5	Not classified
Sodium Chloride	(CAS No) 7647-14-5 (EC no) 231-598-3	0,1 - 1	Not classified
Disodium Phosphate Dihydrate	(CAS No) 10028-24-7	< 0,1	Not classified
Potassium Chloride	(CAS No) 7447-40-7 (EC no) 231-211-8	< 0,1	Not classified

EN (English) ID: FP09 I46 R02 25/08/2022 22/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium Dihydrogen Phosphate	(CAS No) 7778-77-0 (EC no) 231-913-4	< 0,1	Not classified

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.

### **SECTION 4: First aid measures**

#### **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

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.

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

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

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

No additional information available

First-aid measures after eye contact

### **SECTION 5: Firefighting measures**

#### **Extinguishing media**

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

# Special hazards arising from the substance or mixture

No additional information available

### **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.

### **Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### Methods and material for containment and cleaning up

: Soak up spills as soon as possible. Collect spillage. Store away from other materials. Methods for cleaning up

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### **SECTION 7: Handling and storage**

#### Precautions for safe handling

Incompatible products

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.

### 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. Cannot be re-sterlized after opening. Strong bases. Strong acids.

ID: FP09 I46 R02 25/08/2022 EN (English) 23/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Incompatible materials : Sources of ignition. Direct (sun)light.

Storage temperature : 2 - 8 °C

#### 7.3. Specific end use(s)

See instructions for use delivered with the device.

### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety. Avoid all unnecessary exposure.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear fire/flame resistant/retardant clothing.

### Personal protective equipment symbol(s):



### 8.2.2.1. Eye and face protection

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).

### 8.2.2.2. Skin protection

Hand protection

: 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.

Skin protection:

: Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protection must be selected according to the concentration and volume of the dangerous substance at the specific workplace.

# 8.2.2.3. Respiratory protection

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 is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

# Other information:

Do not eat, drink or smoke during use. Do not pipette liquid using a mouth pipette.

25/08/2022 EN (English) ID: FP09 I46 R02 24/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# **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 Not available Not available Melting point Freezing point : Not available Boiling point Not available Non flammable. Flammability Explosive limits Not available Not available Lower explosion limit Upper explosion limit : Not available Flash point : Not available : Not available Auto-ignition temperature : Not available Decomposition temperature 7.2 - 7.4 Viscosity, kinematic : Not available

Solubility : highly soluble in water. Water: complete

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density : Not available Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

#### 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

# 9.2.2. Other safety characteristics

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 (≤ 37°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. Fume.

### **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Not classified. Extensive data from Mouse Embryo Assays have demonstrated that the medium

is not toxic.

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

25/08/2022 EN (English) ID: FP09 I46 R02 25/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21

VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Germ cell mutagenicity : Not classified

Additional information Based on available data, the classification criteria are not met

Not classified Carcinogenicity

Based on available data, the classification criteria are not met Additional information

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Additional information Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated

exposure)

: Not classified

Additional information

: Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

: Based on available data, the classification criteria are not met Additional information

#### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Other information

: Human Albumin Solution: 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.

Potential adverse human health effects and

symptomspot

: Based on available data, the classification criteria are not met

### **SECTION 12: Ecological information**

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified : Not classified

#### 12.2 Persistence and degradability

viui i naw – i nawing i	
Persistence and degradability	Not established.

#### Sodium Chloride (7647-14-5)

Persistence and degradability Not established.

#### 12.3. **Bioaccumulative potential**

# VitriThaw - Thawing 1

Not established Bioaccumulative potential

### Sodium Chloride (7647-14-5)

Bioaccumulative potential Not established.

### **Mobility in soil**

No additional information available

### Results of PBT and vPvB assessment

No additional information available

### **Endocrine disrupting properties**

No additional information available

### Other adverse effects

Avoid release to the 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

ID: FP09 I46 R02 EN (English) 25/08/2022 26/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

#### 14.1. UN number

UN-No. (ADR) / (IMDG) / (IATA) / (ADN) / (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) / (IMDG) / (IATA) : Not applicable

/ (ADN) / (RID)

14.3. Transport hazard class(es)

Transport hazard class(es) (ADR) / (IMDG) / : Not applicable

(IATA) / (ADN) / (RID)

14.4. Packing group

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

(RID)

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

### Overland transport / Transport by sea / Air transport / Inland waterway transport / Rail transport

No data available

#### 14.7. Maritime transport in bulk according to IMO instruments

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

Contains no REACH substances with Annex XVII restrictions

Contains no REACH Annex XIV substances

Contains no substance on the REACH candidate list

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

### 15.1.2. National regulations

### **France**

Occupational diseases	
Code	Description
RG 67 Nasal septum lesions caused by potassium chloride dust in potash mines and their dependencies	

### Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW list of carcinogenic substances : None of the components are listed SZW list of mutagenic substances : None of the components are listed NON-limitative list of substances toxic for : None of the components are listed reproduction - Breast-feeding

reproduction - Breast-reeding

NON-limitative list of substances toxic for : None of the components are listed

reproduction - Fertility

NON-limitative list of substances toxic for : None of the components are listed

reproduction - Development

#### **Switzerland**

Storage class (LK) : LK 10/12 - Liquids

25/08/2022 EN (English) ID: FP09 I46 R02 27/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

#### **Chemical safety assessment**

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE Data sources

COUNCIL of 16 December 2008 on classification, labelling 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.

Safety Data Sheet (SDS), EU

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

ID: FP09 I46 R02 25/08/2022 EN (English) 28/49



# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ID: FP09 I46 R02 Revision date: 25/08/2022 Version Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze

Freezing 2: page 15>21

VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42

Version: D.2

// VitriThaw Thawing 4: page 43>49

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

#### 1.1. Product identifier

Product form : Mixture

Product name : VitriThaw - Thawing 2

Product code : VT2001

## 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 : VitriFreeze™ and VitriThaw™ are a set of media for vitrification and thawing of human embryos

(morula till expanded blastocyst stage).

#### 1.2.2. Uses advised against

No additional information available

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

FertiPro NV Industriepark Noord 32 8730 Beernem Belgium info@fertipro.com

#### 1.4. Emergency telephone number

Emergency number : +3250791805

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

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]

No labelling applicable

### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ultrapure water	(CAS No) 7732-18-5 (EC no) 231-791-2	90 - 99	Not classified
Sucrose	(CAS No) 57-50-1 (EC no) 200-334-9	5 - 10	Not classified
Human serum albumin	(CAS No) 70024-90-7	1 - 5	Not classified
Sodium Chloride	(CAS No) 7647-14-5 (EC no) 231-598-3	0,1 - 1	Not classified
Disodium Phosphate Dihydrate	(CAS No) 10028-24-7	0,1 - 1	Not classified
Potassium Chloride	(CAS No) 7447-40-7 (EC no) 231-211-8	< 0,1	Not classified
Potassium Dihydrogen Phosphate	(CAS No) 7778-77-0 (EC no) 231-913-4	< 0,1	Not classified

25/08/2022 EN (English) ID: FP09 I46 R02 29/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

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.

### **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. Notify authorities if liquid enters sewers or public waters.

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

Methods for cleaning up : Soak up spills as soon as possible. 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. Cannot be re-sterilized after expering.

stored at 2-8°C. Cannot be re-sterlized 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 instructions for use delivered with the device.

25/08/2022 EN (English) ID: FP09 I46 R02 30/49

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety. Avoid all unnecessary exposure.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Wear fire/flame resistant/retardant clothing.

### Personal protective equipment symbol(s):



## 8.2.2.1. Eye and face protection

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).

### 8.2.2.2. Skin protection

Hand protection

: 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.

Skin protection:

Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protection must be selected according to the concentration and volume of the dangerous substance at the specific workplace.

## 8.2.2.3. Respiratory protection

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 is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

### 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.

25/08/2022 EN (English) ID: FP09 I46 R02 31/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21

VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Odour threshold : Not available Melting point Not available Freezing point Not available **Boiling point** Not available Flammability Non flammable. **Explosive limits** Not available Lower explosion limit Not available Upper explosion limit Not available Not available Flash point Auto-ignition temperature : Not available Decomposition temperature : Not available : 7.2 - 7.4 pΗ Not available Viscosity, kinematic

Solubility : highly soluble in water. Water: complete

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density : Not available Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

#### 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

### 9.2.2. Other safety characteristics

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 (≤ 37°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. Fume.

### **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral, dermal, inhalation) : Not classified. Extensive data from Mouse Embryo Assays have demonstrated that the medium

is not toxic.

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

25/08/2022 EN (English) ID: FP09 I46 R02 32/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure)

: Not classified Additional information Based on available data, the classification criteria are not met : Not classified

Specific target organ toxicity (repeated

exposure)

Additional information

: Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

#### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Potential adverse human health effects and

symptoms

Other information

Based on available data, the classification criteria are not met.

Human Albumin Solution: 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**

#### **Toxicity**

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified : Not classified

### Persistence and degradability

vitri naw – i nawing 2		
Persistence and degradability	Not established.	

# Sodium Chloride (7647-14-5)

Persistence and degradability Not established

#### **Bioaccumulative potential** 12.3.

### VitriThaw - Thawing 2

Bioaccumulative potential Not established

# Sodium Chloride (7647-14-5)

Bioaccumulative potential Not established.

#### 12.4. Mobility in soil

No additional information available

### Results of PBT and vPvB assessment

No additional information available

### **Endocrine disrupting properties**

No additional information available

#### Other adverse effects

Avoid release to the environment

### **SECTION 13: Disposal considerations**

### Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

: Avoid release to the environment. Ecology - waste materials

### **SECTION 14: Transport information**

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

#### **UN** number

UN-No. (ADR) / (IMDG) / (IATA) / (ADN) / (RID) : Not applicable

**UN** proper shipping name

Proper Shipping Name (ADR) / (IMDG) / (IATA) : Not applicable

/ (ADN) / (RID)

ID: FP09 I46 R02 EN (English) 25/08/2022 33/49

### Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

#### 14.3. Transport hazard class(es)

Transport hazard class(es) (ADR) / (IMDG) / : Not applicable

(IATA) / (ADN) / (RID)

14.4. Packing group

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

(RID)

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

### Overland transport / Transport by sea / Air transport / Inland waterway transport / Rail transport

No data available

### 14.7. Maritime transport in bulk according to IMO instruments

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

Contains no REACH substances with Annex XVII restrictions

Contains no REACH Annex XIV substances

Contains no substance on the REACH candidate list

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

### 15.1.2. National regulations

#### France

Occupational diseases	
Code	Description
RG 67	Nasal septum lesions caused by potassium chloride dust in potash mines and their dependencies

#### Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

**Netherlands** 

SZW list of carcinogenic substances : None of the components are listed SZW list of mutagenic substances : None of the components are listed NON-limitative list of substances toxic for : None of the components are listed

reproduction - Breast-feeding

NON-limitative list of substances toxic for : None of the components are listed

reproduction - Fertility

NON-limitative list of substances toxic for : None of the components are listed

reproduction - Development

**Switzerland** 

Storage class (LK) : LK 10/12 - Liquids

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

25/08/2022 EN (English) ID: FP09 I46 R02 34/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# **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, labelling 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.

Safety Data Sheet (SDS), EU

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

25/08/2022 EN (English) ID: FP09 I46 R02 35/49



# Safety Data Sheet

according to Regulation (EC) No. 453/2010

ID: FP09 I46 R02 Revision date: 07/12/2017 Version: D.1

Safety data: VitriFreeze Pre-incubation: page 1>5 // VitriFreeze Freezing 1: page 6>10 // VitriFreeze

Freezing 2: page 11>15

VitriThaw Thawing 1: page 16>20 // VitriThaw Thawing 2: page 21>25 // VitriThaw Thawing 3: page 26>30

// VitriThaw Thawing 4: page 31>35

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

### 1.1. Product identifier

Product form : Mixture

Product name : VitriThaw - Thawing 3

Product code : VT3001

## 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 : VitriFreeze™ and VitriThaw™ are a set of media for vitrification and thawing of human embryos

(morula till expanded blastocyst stage).

#### 1.2.2. Uses advised against

No additional information available

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

FertiPro NV Industriepark Noord 32 8730 Beernem Belgium info@fertipro.com

#### 1.4. Emergency telephone number

Emergency number : +3250791805

### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

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]

No labelling applicable

#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### **SECTION 3: Composition/information on ingredients**

### 3.1. Substance

Not applicable

# 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ultrapure water	(CAS No) 7732-18-5 (EC no) 231-791-2	90 - 99	Not classified
Sucrose	(CAS No) 57-50-1 (EC no) 200-334-9	1 - 5	Not classified
Human serum albumin	(CAS No) 70024-90-7	1 - 5	Not classified
Sodium Chloride	(CAS No) 7647-14-5 (EC no) 231-598-3	0,1 - 1	Not classified
Disodium Phosphate Dihydrate	(CAS No) 10028-24-7	0,1 - 1	Not classified
Potassium Chloride	(CAS No) 7447-40-7 (EC no) 231-211-8	< 0,1	Not classified

07/12/2017 EN (English) ID: FP09 I46 R02 36/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Potassium Dihydrogen Phosphate	(CAS No) 7778-77-0 (EC no) 231-913-4	< 0,1	Not classified

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.

## **SECTION 4: First aid measures**

#### **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.

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by First-aid measures after skin contact

warm water rinse

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness First-aid measures after eye contact

persist.

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

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

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

No additional information available

## **SECTION 5: Firefighting measures**

#### **Extinguishing media**

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

# Special hazards arising from the substance or mixture

No additional information available

### 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

: Equip cleanup crew with proper protection. Protective equipment

**Emergency procedures** : Ventilate area.

## **Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

# Methods and material for containment and cleaning up

: Soak up spills as soon as possible. Collect spillage. Store away from other materials. Methods for cleaning up

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## **SECTION 7: Handling and storage**

### 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.

### 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. Cannot be re-sterlized after opening.

ID: FP09 I46 R02 25/08/2022 EN (English) 37/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21

VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Incompatible products : Strong bases. Strong acids. Incompatible materials : Sources of ignition. Direct (sun)light.

: 2-8°C Storage temperature

#### 7.3. Specific end use(s)

See instructions for use delivered with the device.

# **SECTION 8: Exposure controls/personal protection**

#### **Control parameters**

# 8.1.1 National occupational exposure and biological limit values

No additional information available

### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

## 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### **Exposure controls**

### 8.2.1. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety. Avoid all unnecessary exposure.

### 8.2.2. Personal protection equipment

### Personal protective equipment:

Wear fire/flame resistant/retardant clothing.

### Personal protective equipment symbol(s):



### 8.2.2.1. Eye and face protection

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).

# 8.2.2.2. Skin protection

Hand protection

: 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.

Skin protection:

Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protection must be selected according to the concentration and volume of the dangerous substance at the specific workplace.

# 8.2.2.3. Respiratory protection

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 is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 8.2.2.4. Thermal hazards

No additional information available

ID: FP09 I46 R02 25/08/2022 EN (English) 38/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

### 8.2.3. Environmental exposure controls

#### 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.

Odourless. Odour Odour threshold Not available Melting point Not available Not available Freezing point Boiling point Not available Flammability Non flammable. Not available Explosive limits Not available Lower explosion limit : Not available Upper explosion limit Flash point : Not available : Not available Auto-ignition temperature : Not available Decomposition temperature : 7.2 - 7.4

Viscosity, kinematic : Not available

Solubility : highly soluble in water. Water: complete

Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density : Not available Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

# 9.2. Other information

## 9.2.1. Information with regard to physical hazard classes

No additional information available

# 9.2.2. Other safety characteristics

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 (≤ 37°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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral, dermal, inhalation) : Not classified. Extensive data from Mouse Embryo Assays have demonstrated that the medium

is not toxic.

Skin corrosion/irritation : Not classified

25/08/2022 EN (English) ID: FP09 I46 R02 39/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation Not classified

Based on available data, the classification criteria are not met Additional information

Respiratory or skin sensitisation Not classified

Based on available data, the classification criteria are not met Additional information

Germ cell mutagenicity Not classified

Additional information Based on available data, the classification criteria are not met

Carcinogenicity Not classified

Additional information Based on available data, the classification criteria are not met

Reproductive toxicity Not classified

Additional information Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated : Not classified

exposure)

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

### 11.2.2. Other information

Potential adverse human health effects and

symptoms

Other information

Based on available data, the classification criteria are not met.

Human Albumin Solution: 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**

## **Toxicity**

Hazardous to the aquatic environment, short-term

: Not classified

(acute)

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

#### 12.2. Persistence and degradability

Persistence and degradability	Not established.
Sodium Chloride (7647-14-5)	
Persistence and degradability	Not established.

#### 12.3. **Bioaccumulative potential**

VitriThaw - Thawing 3	
Bioaccumulative potential Not established.	
Sodium Chloride (7647-14-5)	
Persistence and degradability	Not established.

## **Mobility in soil**

VitriThaw - Thawing 3

No additional information available

# Results of PBT and vPvB assessment

No additional information available

### **Endocrine disrupting properties**

No additional information available

#### 12.7. Other adverse effects

Avoid release to the environment

ID: FP09 I46 R02 25/08/2022 EN (English) 40/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# **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

UN-No. (ADR) / (IMDG) / (IATA) / (ADN) / (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) / (IMDG) / (IATA) : Not applicable

/ (ADN) / (RID)

14.3. Transport hazard class(es)

Transport hazard class(es) (ADR) / (IMDG) / : Not applicable

(IATA) / (ADN) / (RID)

14.4. Packing group

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

(RID)

#### 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

# Overland transport / Transport by sea / Air transport / Inland waterway transport / Rail transport

No data available

### 14.7. Maritime transport in bulk according to IMO instruments

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

Contains no REACH substances with Annex XVII restrictions

Contains no REACH Annex XIV substances

Contains no substance on the REACH candidate list

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

## 15.1.2. National regulations

### **France**

Occupational diseases	
Code	Description
RG 67	Nasal septum lesions caused by potassium chloride dust in potash mines and their dependencies

# Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

## **Netherlands**

SZW list of carcinogenic substances : None of the components are listed SZW list of mutagenic substances : None of the components are listed

25/08/2022 EN (English) ID: FP09 I46 R02 41/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

NON-limitative list of substances toxic for

reproduction - Breast-feeding

: None of the components are listed

NON-limitative list of substances toxic for

reproduction - Fertility

NON-limitative list of substances toxic for

: None of the components are listed

1011-IIIIIItative list of substances toxic

reproduction - Development

: None of the components are listed

**Switzerland** 

Storage class (LK) : LK 10/12 - Liquids

### 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, labelling 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.

Safety Data Sheet (SDS), EU

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

25/08/2022 EN (English) ID: FP09 I46 R02 42/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

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

### 1.1. Product identifier

Product form : Mixture

Product name : VitriThaw - Thawing 4

Product code : VT4001

### 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 : VitriFreeze™ and VitriThaw™ are a set of media for vitrification and thawing of human embryos

(morula till expanded blastocyst stage).

#### 1.2.2. Uses advised against

No additional information available

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

FertiPro NV

Industriepark Noord 32 8730 Beernem Belgium

info@fertipro.com

### 1.4. Emergency telephone number

Emergency number : +3250791805

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

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]

No labelling applicable

### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## **SECTION 3: Composition/information on ingredients**

### 3.1. Substance

Not applicable

## 3.2. Mixture

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

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.

25/08/2022 EN (English) ID: FP09 I46 R02 43/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

## **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. Notify authorities if liquid enters sewers or public waters.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Soak up spills as soon as possible. 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

Incompatible products

: 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.

Cannot be re-sterlized after opening.

: Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct (sun)light.

Storage temperature : 2 - 8 °C

## 7.3. Specific end use(s)

See instructions for use delivered with the device.

25/08/2022 EN (English) ID: FP09 I46 R02 44/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

# SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

#### 8 1 4 DNFL and PNFC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety. Avoid all unnecessary exposure.

## 8.2.2. Personal protection equipment

### Personal protective equipment:

Wear fire/flame resistant/retardant clothing.

## Personal protective equipment symbol(s):



# 8.2.2.1. Eye and face protection

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).

## 8.2.2.2. Skin protection

Hand protection

: 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.

Skin protection:

Complete suit protecting against chemicals, flame retardant antistatic protective clothing. The type of protection must be selected according to the concentration and volume of the dangerous substance at the specific workplace.

# 8.2.2.3. Respiratory protection

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 is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 8.2.2.4. Thermal hazards

No additional information available

## 8.2.3. Environmental exposure controls

## 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.

25/08/2022 EN (English) ID: FP09 I46 R02 45/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21

VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Odour : Odourless. Odour threshold Not available Melting point Not available Freezing point Not available Not available Boiling point Flammability Non flammable. Explosive limits Not available Lower explosion limit Not available Upper explosion limit Not available Flash point : Not available : Not available Auto-ignition temperature Decomposition temperature : Not available : 7,2 - 7,4 pН Viscosity, kinematic Not available

Solubility : highly soluble in water. Water: complete

Partition coefficient n-octanol/water (Log Kow) : Not available : Not available Vapour pressure : Not available Vapour pressure at 50 °C Density : Not available Relative density Not available Relative vapour density at 20 °C : Not available Particle characteristics : Not applicable

#### 9.2 Other information

## 9.2.1. Information with regard to physical hazard classes

No additional information available

# 9.2.2. Other safety characteristics

No additional information available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

### **Chemical stability**

Stable after transport (max. 5 days) at elevated temperature (≤ 37°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.

# Incompatible materials

Strong acids. Strong bases.

### **Hazardous decomposition products**

Carbon monoxide. Carbon dioxide.

# **SECTION 11: Toxicological information**

## Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral, dermal, inhalation) : Not classified. Extensive data from Mouse Embryo Assays have demonstrated that the medium

is not toxic.

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation Not classified

Additional information Based on available data, the classification criteria are not met

Respiratory or skin sensitisation Not classified

: Based on available data, the classification criteria are not met Additional information

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

ID: FP09 I46 R02 25/08/2022 EN (English) 46/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated

exposure)

: Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

### 11.2. Information on other hazards

## 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Potential adverse human health effects and

symptoms

Other information

: Based on available data, the classification criteria are not met.

Human Albumin Solution: 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

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

# 12.2. Persistence and degradability

VitriThaw – Thawing 4	
Persistence and degradability	Not established.
Sodium Chloride (7647-14-5)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

vitri i naw – i nawing 4	
Bioaccumulative potential	Not established.

# Sodium Chloride (7647-14-5)

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. Endocrine disrupting properties

No additional information available

# 12.7. Other adverse effects

Avoid release to the 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

UN-No. (ADR) / (IMDG) / (IATA) / (ADN) / (RID) : Not applicable

25/08/2022 EN (English) ID: FP09 I46 R02 47/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21
VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) / (IMDG) / (IATA) : Not applicable

/ (ADN) / (RID)

14.3. Transport hazard class(es)

Transport hazard class(es) (ADR) / (IMDG) / : Not applicable

(IATA) / (ADN) / (RID)

14.4. Packing group

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

(RID)

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

### Overland transport / Transport by sea / Air transport / Inland waterway transport / Rail transport

No data available

### 14.7. Maritime transport in bulk according to IMO instruments

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

Contains no REACH substances with Annex XVII restrictions

Contains no REACH Annex XIV substances

Contains no substance on the REACH candidate list

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

### 15.1.2. National regulations.

### France

Occupational diseases	
Code	Description
RG 67	Nasal septum lesions caused by potassium chloride dust in potash mines and their dependencies

### Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

**Netherlands** 

SZW list of carcinogenic substances : None of the components are listed SZW list of mutagenic substances : None of the components are listed NON-limitative list of substances toxic for : None of the components are listed

reproduction - Breast-feeding

NON-limitative list of substances toxic for : None of the components are listed

reproduction - Fertility

NON-limitative list of substances toxic for : None of the components are listed

reproduction - Development

**Switzerland** 

Storage class (LK) : LK 10/12 - Liquids

25/08/2022 EN (English) ID: FP09 I46 R02 48/49

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Safety data: VitriFreeze Pre-incubation: page 1>7 // VitriFreeze Freezing 1: page 8>14 // VitriFreeze Freezing 2: page 15>21 VitriThaw Thawing 1: page 22>28 // VitriThaw Thawing 2: page 29>35 // VitriThaw Thawing 3: page 36>42 // VitriThaw Thawing 4: page 43>49

### **Chemical safety assessment**

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE Data sources

COUNCIL of 16 December 2008 on classification, labelling 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.

Safety Data Sheet (SDS), EU

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

ID: FP09 I46 R02 EN (English) 25/08/2022 49/49