





- If the person is unconscious, seek emergency medical attention.
- Remove the person to fresh air.
- **Skin contact:**
  - Wash off immediately with plenty of water and soap.
  - Remove all contaminated clothing.
- **Eye contact:**
  - Flush eyes immediately with water for 10-15 minutes.

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

- Refer to Section 11.

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

- No special treatment needed; treat symptomatically.
- If exposed or concerned: Report to your Safety Officer and seek medical advice immediately.

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### Section 5: Firefighting measures

#### 5.1. Extinguishing media:

- **Suitable extinguishing media:** Choose extinguishing media based on surrounding fire.
- **Unsuitable extinguishing media:** No data available.

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

- During a fire, irritating and toxic gases may be generated by thermal decomposition. The inhalation of such combustion products can have serious adverse effects on health.

#### 5.3. Advice for firefighters:

- Wear full protective clothing and self-contained breathing apparatus.

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### Section 6: Accidental release measures

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

- **For non-emergency personnel:** Allow only well-trained experts wearing suitable protective clothing to remain in the field of accident.
- **For emergency responders:** Use personal protective equipment, including safety glasses, laboratory gloves, and appropriate laboratory clothing to prevent skin exposure. Do not open primary containers if not authorized.

#### 6.2. Environmental precautions:

- Dispose of the spillage and resulting waste according to applicable environmental regulations. Do not allow the product or resulting waste to enter sewers, soil, surface, or groundwater. Notify respective authorities in case of environmental pollution immediately.

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



**PNEC values:**

**Compartment Value Note(s)**

Freshwater No data No notes  
 Marine water No data No notes  
 Freshwater

sediment | No data | No notes | | Marine water sediment | No data | No notes | | Sewage Treatment Plant (STP) | No data | No notes | | Intermittent release | No data | No notes | | Secondary poisoning | No data | No notes | | Soil | No data | No notes |

**8.2. Exposure controls:**

- **Appropriate engineering controls:** In pursuance of work, proper foresight is needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.
- **Individual protection measures, such as personal protective equipment:** Avoid contact with skin, eyes, and clothing. Keep away from food and drinks. Wash hands immediately after handling the product.
  - **Eye/face protection:** Use appropriate protective glasses (EN 166).
  - **Skin protection:**
    - **Hand protection:** Use appropriate protective gloves (EN 374).
    - **Other:** Wear a lab coat while handling the product.
  - **Respiratory protection:** Normally, no respiratory protective equipment is required. Use a fume hood to keep airborne concentrations low. No exposure limits are known. European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.
  - **Thermal hazards:** No thermal hazards known.

**8.2.3. Environmental exposure controls:**

- No specific prescription. The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, expert advice is necessary before deciding on further protective measures.

**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties:**

Parameter	Value / Test method / Remarks
Appearance	Frozen or liquid; no information available for cell cultures
Odour	No data*
Odour threshold	No data*
pH	No data*
Melting point/freezing point	No data*
Initial boiling point and boiling range	No data*
Flash point	No data*
Evaporation rate	No data*
Flammability (solid, gas)	No data*
Upper/lower flammability or explosive limits	No data*
Vapour pressure	No data*
Vapour density	No data*

Parameter	Value / Test method / Remarks
Relative density	No data*
Solubility(ies)	No data*
Partition coefficient: n-octanol/water	No data*
Auto-ignition temperature	No data*
Decomposition temperature	No data*
Viscosity	No data*
Explosive properties	No data*
Oxidizing properties	No data*

## 9.2. Other information:

- **Chemical Properties:** Frozen cell cultures may contain DMSO. DMSO is stable and incompatible with a wide range of materials, including acid chlorides, strong acids, strong oxidizing agents, strong reducing agents, phosphorus halides, moisture, copper wool + trichloroacetic acid, and hygroscopic materials.

\*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet.

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## Section 10: Stability and reactivity

### 10.1. Reactivity:

- No reactivity known.

### 10.2. Chemical stability:

- Stable under normal conditions.

### 10.3. Possibility of hazardous reactions:

- Hazardous polymerization will not occur.

### 10.4. Conditions to avoid:

- No conditions to avoid known.

### 10.5. Incompatible materials:

- No incompatible materials known.

### 10.6. Hazardous decomposition products:

- No hazardous decomposition products known.

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## Section 11: Toxicological information

### 11.1. Information on toxicological effects:





## 14.2. UN proper shipping name:

- No proper shipping name.

## 14.3. Transport hazard class(es):

- No transport hazard classes.

## 14.4. Packing group:

- No packing group.

## 14.5. Environmental hazards:

- No relevant information available.

## 14.6. Special precautions for user:

- Additional information may be provided for the carriage of Dangerous Goods by road and air, regarding classification, packaging, and labeling, as cryovials (deep-frozen ampoules) must be shipped on dry ice or liquid nitrogen. The package will indicate all required information. Please contact the manufacturer in case of any questions regarding transport.

## 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:

- Not applicable.

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## Section 15: Regulatory information

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

- **Applicable Regulations:**

- REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No

91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21.

- REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling, and packaging of substances and mixtures, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006.
- COMMISSION REGULATION (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
- All necessary licenses for import, holding, transfer, and export are in place from Cytion. The recipient must provide evidence of permits and licenses required by law for receiving and handling. Substances are for research use only.

### 15.2. Chemical safety assessment:

- No information available.

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## Section 16: Other information

### Information regarding the revision of the safety data sheet:

- No information available.

### Literature references / data sources:

- Safety data sheet issued by the manufacturer (October 2020, English).

### Methods used for the classification according to Regulation (EC) No 1272/2008:

- Not considered as a hazardous mixture.

### Relevant hazard statements (code and full text) of Sections 2 and 3:

- H301 – Toxic if swallowed.
- H311 – Toxic in contact with skin.
- H319 – Causes serious eye irritation.
- H335 – May cause respiratory irritation.

### Training advice:

- No data available.

### Full text of the abbreviations in the safety data sheet:

- **ADN:** The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
- **ADR:** The European Agreement concerning the International Carriage of Dangerous Goods by Road.
- **ATE:** Acute Toxicity Estimate.
- **AOX:** Adsorbable organic halides.
- **BCF:** Bioconcentration factor.
- **BOD:** Biological Oxygen Demand.
- **CAS number:** Chemical Abstract Service number.
- **CLP:** Regulation (EC) No 1272/2008 on classification, labeling, and packaging of substances and mixtures.
- **CMR effects:** Carcinogenic, mutagenic, reprotoxic effects.
- **COD:** Chemical Oxygen Demand.
- **CSA:** Chemical Safety Assessment.
- **CSR:** Chemical Safety Report.
- **DNEL:** Derived-No-Effect-Level.
- **ECHA:** European Chemical Agency.
- **EC:** European Community.
- **EC number:** EINECS and ELINCS numbers (see also EINECS and ELINCS).
- **EEC:** European Economic Community.
- **EEA:** European Economic Area (EU + Iceland, Liechtenstein, and Norway).
- **EINECS:** European Inventory of Existing Commercial Chemical Substances.
- **ELINCS:** European List of Notified Chemical Substances.
- **EN:** European Norm.
- **EU:** European Union.

