

## Section 1: Identification of the mixture and of the company/undertaking

### 1.1. Product identifier:

- Frozen and Living Cell Cultures (Biosafety Level, BSL 1 and 2)
- BSL2 cell lines categorized according to TRBA 468 and German IfSG (Infektions-Schutz-Gesetz, Germany).

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

- For in vitro research use only. For professional, industrial use.
- Not for use in human, therapeutic, or diagnostic applications.

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

#### German Headquarters:

- **Company Name:** Cytion GmbH
- **Address:** Dr.-Eckener-Str. 8, 69214 Eppelheim, Germany
- **Telephone:** +49(0)6221-405780
- **Email:** info@cytion.com
- **Responsible person:** Jonathan Steubing

#### US Office:

- **Company Name:** Cell Lines Service LLC, d/b/a Cytion
- **Address:** 6330 S Western Ave #140, Sioux Falls, SD 57108, United States
- **Telephone:** +1 605-800-7310
- **Email:** [contact@us.cytion.com](mailto:contact@us.cytion.com)
- **Responsible person:** Oliver Goernhardt

### 1.4. Emergency telephone number:

- **Germany:** +49 6221-405-780
- **United States:** +1 605-800-7310

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## Section 2: Hazards identification

### 2.1. Classification of the mixture:

- **Biological hazards:**
  - **Biosafety Level 1 Cell Cultures:** Handle as potentially biohazardous under Biosafety Level 1 containment. Although not known to cause disease in healthy humans, this cannot be excluded. The material has not been screened for Hepatitis B, HIV, or other adventitious agents unless stated on the Certificate of Analysis or product information sheet. Use personal protective equipment (PPE) as necessary.
  - **Biosafety Level 2 Cell Cultures:** Handle as potentially biohazardous under Biosafety Level 2 containment. This material is virally transformed or contains Epstein-Barr-Virus particles, which may be associated with human disease. Hazards include percutaneous injury, ingestion, and mucous membrane exposure. The material has not been screened for Hepatitis B, HIV, or other adventitious agents unless stated on the Certificate of Analysis or product information sheet. PPE and strict procedures MUST be followed.

- **Chemical hazards:**
  - Frozen cell cultures may contain 5 to 10% (v/v) dimethyl sulphoxide (DMSO). DMSO may be harmful if in contact with skin or ingested and is irritating to eyes and the respiratory system. Avoid contact with skin, eyes, digestive, and respiratory systems if thawed. PPE is required.
- **Physical hazards:**
  - Frozen vials may be pressurized due to trapped liquid nitrogen, posing a risk of explosion upon warming, especially if shipped in a liquid nitrogen container. Wear protective equipment when handling such packages.

### Classification according to Regulation (EC) No 1272/2008 (CLP):

- Not considered a hazardous mixture. No hazard statements.

### 2.2. Label elements:

- **Hazard statements:** None.
- **Precautionary statements:** None.

### 2.3. Other hazards:

- **PBT and vPvB assessment:** No data available.

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## Section 3: Composition/information on ingredients

### 3.1. Substances:

- Not applicable.

### 3.2. Mixtures:

- **Description:** Various animal and human cell cultures at Biosafety Level 1 or 2. Frozen or growing cells are shipped in a yellow or pink liquid cell culture medium (pH 6-8) containing inorganic salts, vitamins, amino acids, carbohydrates, other nutrients, and phenol red dissolved in water. Frozen cultures may also contain 5-10% DMSO as a cryoprotectant.
- **Unit:** Cryovial (frozen liquid in a small plastic container) or flask (living cell culture in a plastic flask).
- **Hazardous ingredients:**

Non-Hazardous Ingredient(s)	Percentage (%)
Cell culture media, supplemented for freezing	60-80
FBS (Fetal Bovine Serum)	0-20
Cells	1

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## Section 4: First aid measures

### 4.1. Description of first aid measures:

- **Ingestion:**
  - Rinse the mouth with water.
  - If the person is unconscious, seek emergency medical attention.
  - Avoid inducing vomiting unless directed by a medical professional.
- **Inhalation:**





**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*





- No toxic or exposure data available for cell lines; however, general protection procedures apply. Wear appropriate protection equipment.

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### Section 12: Ecological information

#### 12.1. Toxicity:

- No data available.

#### 12.2. Persistence and degradability:

- No data available.

#### 12.3. Bioaccumulative potential:

- No data available.

#### 12.4. Mobility in soil:

- No data available.

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

- No data available.

#### 12.6. Other adverse effects:

- No data available.

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### Section 13: Disposal considerations

#### 13.1. Waste treatment methods:

- **Information regarding the disposal of the product:** Follow established procedures for Containment (Biosafety) Level 1 and 2. Hazardous waste generators are required. Please check if discarded chemical is classified as hazardous waste. Follow all national, regional, and local regulations.
- **List of Waste Code:** No waste disposal key according to the List of Waste Code (LoW code) can be determined for this product, as only the purpose of application defined by the user enables an allocation. The LoW code number must be determined after a discussion with a waste disposal specialist.
- **Information regarding the disposal of the packaging:** Dispose of in accordance with applicable regulations.
- **Physical/chemical properties that may affect waste treatment options:** No data available.
- **Sewage disposal:** No data available.
- **Special precautions for any recommended waste treatment:** No data available.

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### Section 14: Transport information

#### 14.1. UN Number:

- No UN Number.

**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.

