

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
- **Responsible person:** Oliver Goernhardt

1.4. Emergency telephone number:

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

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.

- 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.

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.

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*

- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

11.1.1. Summaries of the information derived from the test conducted:

- No data available.

11.1.2. Relevant toxicological properties:

- **Toxicity data for DMSO:**

Route	LD50 (mg/kg)	Species
ORL-RAT	14500	Rat
ORL-MAM	21400	Mammal
IVN-MAN	686	Human
IPR-RAT	8200	Rat
IVN-MUS	3100	Mouse
ORL-BWD	100	Bird
IVN-DOG	2500	Dog

11.1.3. Information on likely routes of exposure:

- Ingestion, inhalation, skin contact, eye contact.

11.1.4. Symptoms related to the physical, chemical, and toxicological characteristics:

- No data available.

11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:

- No data available.

11.1.6. Interactive effects:

- No data available.

11.1.7. Absence of specific data:

- The toxicological properties have not been fully reported.

11.1.8. Other information:

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

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.

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.

Section 14: Transport information

14.1. UN Number:

- No UN Number.

- No information available.

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.

