

- 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:

- Clean contaminated surfaces thoroughly.
- Autoclave before disposal into appropriate containers. Follow appropriate cleaning procedures if spilled.
- Use absorbent material and disinfect. Wash contaminated clothing separately. Wash with soap and water. Additional personal protective equipment for cleaning may be mandatory.

6.4. Reference to other sections:

- For further and detailed information, see Sections 8 and 13.

Section 7: Handling and storage

7.1. Precautions for safe handling:

- Observe conventional hygiene precautions.
- Handle and store according to instructions on the product information sheet.
- **Technical measures:** Follow established laboratory procedures when handling. Open only under a sterile workbench. Wear protective equipment. Handle as if containing infectious material.
- **Precautions against fire and explosion:** No special measures required.

7.2. Conditions for safe storage, including any incompatibilities:

- **Technical measures and storage conditions:** Handle and store according to instructions on the product information sheet. Keep cryovials at -150°C (freezer) or at -196°C (liquid nitrogen vapor phase).
- **Incompatible materials:** See Section 10.5
- **Packaging material:** No special prescriptions.

7.3. Specific end use(s):

- No specific instructions available.

Section 8: Exposure controls/personal protection

8.1. Control parameters:

- Occupational exposure limit values (Commission Directive (EC) No 2000/39 of 8 June 2000): The components of the mixture are not regulated with exposure limit value.

DNEL values:

Exposure	Dermal exposure		Inhalative exposure			
	Oral exposure	Dermal exposure	Inhalative exposure			
	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer (Local)	No data	No data	No data	No data	No data	No data
Consumer (Systemic)	No data	No data	No data	No data	No data	No data
Worker (Local)	No data	No data	No data	No data	No data	No data
Worker (Systemic)	No data	No data	No data	No data	No data	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.

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.

Section 11: Toxicological information**11.1. Information on toxicological effects:**

- 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.

