

GlioStem

Safety data sheet according to EU regulation no. 1907/2006 (REACH)

Section 1. Identification of the substance and the company

Product identifier:

Substance name: GlioStem
IUPAC name: 1,1'-([2,2':5',2'':5'',2''':5''',2''''-quinoxaline]-3''',4'-diylbis(ethane-2,1-diyl))bis(3-methyl-1H-imidazol-3-ium) 4-methylbenzenesulfonate
CAS no.: Not applicable
EG no.: Not applicable
REACH registration no.: Not applicable

Relevant identified uses of the substance and uses advised against:

Laboratory reagent. Used for diagnostic purposes of biological material.

Details of the supplier of the safety data sheet:

Celluminova AB c/o OBOE IPR, Box 1891 581 18 Linköping Sweden Tel: +46 (0)704674304 E-mail: info@celluminova.se www.celluminova.se	Emergency telephone number: Tel: +46 (0)704674304. Only available during office hours.
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Section 2. Hazards identification

Classification of the substance:

Due to lack of data, this substance cannot be classified in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging. A safety data sheet is being supplied as it contains a substance that is under pharmaceutical development and has not been fully tested.

Other hazards: The chemical, physical, and toxicological properties of GlioStem have not been fully evaluated. Exposure by any route should be avoided. A water solution of this substance is not expected to possess additional risks than those described in this SDS.

Section 3. Composition / information on ingredients

Name	CAS no.	EG no / INDEX no	Weight % content (or range)
GlioStem	N/A	N/A	≤ 95%

Section 4. First aid measures

Description of first aid measures:

General advice:

In case of unconsciousness: Move the unconscious person into recovery position, keep person's head low and keep warm. If not breathing, give artificial respiration. Call for medical attention or ambulance immediately. Show this safety data sheet to doctor or emergency ward.

Inhalation: Move the affected person to fresh air. Keep the affected person at rest and under surveillance. In case of discomfort or if breathing becomes difficult: Seek medical attention or hospital emergency ward.

Skin: Remove contaminated clothing immediately. Flush the skin immediately with plenty of water and wash carefully with water and soap. In case of discomfort: Seek medical attention.

Eyes: Contact lenses, if any, must be removed. Flush immediately with water or isotonic saline for at least 15 minutes. Assure adequate flushing by lifting the lower and upper eyelids. If irritation persists: Seek medical attention or emergency ward. Keep flushing during the transport to doctor or emergency ward.

Ingestion: Immediately wash out mouth with water and drink plenty of water. Do not give any liquid if the person is unconscious. Do not provoke vomiting. If vomiting occurs, keep head low to prevent aspiration of stomach contents into the lungs. In that case, seek medical attention immediately or ambulance.

Most important symptoms and effects, both acute and delayed:

No information available. The substance has not been fully tested.

Section 5. Firefighting measures

Extinguishing media:

All traditional extinguishing media such as water, foam, powder or carbon dioxide. Do not use high pressure media due to risk of spreading the fire.

Special hazards arising from the substance:

In case of fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Advice for firefighters:

In case of severe fuming a self-contained breathing apparatus and suitable protective clothing should be worn to prevent contact with skin and eyes.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure suitable personal protection during removal of spillages. Keep away unauthorised persons. Limit the spreading and generation of dust. Provide sufficient ventilation.

Environmental precautions:

Avoid release into the environment. Collect spillage and do not empty into drains. In case of accidental environmental discharge: Inform local environmental authorities.

Methods and material for containment and cleaning up:

Wipe up spill with e.g. humid paper and avoid raising dust. Carefully wash the spillage area with water and ethanol. Spill and material used for cleaning must be handled as chemical waste.

Reference to other sections: See section 8 and 13.

Section 7. Handling and storage

Precautions for safe handling:

Avoid inhalation of dust or fumes. Provide efficient ventilation. Avoid generation and spreading of dust. Avoid contact with skin, eyes and clothing. Immediately change contaminated clothing. Wash skin immediately if contaminated. Access to water and emergency eye wash / eye wash fountains required within the immediate work area.

Conditions for safe storage, including any incompatibilities:

Store tightly closed at 2 – 8 C ° in a dry and well-ventilated place. Avoid prolonged exposure to light. Must always be stored soundly and securely under lock and out of the reach of unauthorised persons, away from food stuff, feed, finished medicine etc.

Specific end use(s):

Uses: See section 1 above

Section 8. Exposure controls/personal protection

Workplace control parameters:

No international or regulatory occupational exposure limit values have been established for this substance.

Exposure controls

Appropriate engineering controls:

Avoid inhalation of dust or fumes: Use fume hood or mechanical point source exhaust. Avoid skin contact. Use gloves. There must be access to running water and eye wash.

Individual protection measures, such as personal protective equipment:

Respiratory protection: Use mouth protection. However, respiratory equipment is normally not necessary when using fume hood or point source exhaust.

Skin protection: Use protective clothing (e.g. lab coat) and chemical resistant protection gloves (e.g. nitrile gloves). It has not been possible to obtain information about perforation time and it is therefore recommended to change gloves in case of contamination/spillage.

Eye protection: Always use ordinary protection glasses in connection with procedures generating dust or fumes. Contact lenses should not be worn.

Environmental exposure controls:

Any remainders and research waste must be collected and disposed of as described under section 13. Treatment and discharge of waste water must be made in accordance with local regulations.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties:

Physical state and appearance:	Lyophilized powder
Odour:	Odorless
Molecular weight:	973,30 g/mol
pH solution:	7
Solubility:	Soluble in water
Acid dissociation constant, pKa:	No data available
Partition coefficient n-octanol/water:	No data available

Melting point / melting range (°C):	No data available
Freezing point / freezing range (°C):	Not applicable
Initial boiling point and boiling range (°C):	Not applicable
Flash point (°C):	No data available
Evaporation time:	As water
Flammability (solid, gas):	Not flammable
Upper/lower ignition or explosion limits (vol-%):	No data available
Vapour pressure (hPa, 20°C):	No data available
Vapour density (air=1):	No data available
Relative mass density (g/cm ³ , 25°C):	No data available
Autoignition temperature (°C):	No data available
Decomposition temperature (°C):	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available

Other information: No relevant information available

Section 10. Stability and reactivity

Reactivity:	Not reactive under normal use and conditions.
Chemical stability:	Substance is stable under storage as specified in section 7.
Possibility of hazardous reactions:	None known.
Conditions to avoid:	Low pH. Protect from light.
Incompatible materials:	None known.
Hazardous decomposition products:	None known. May form hazardous decomposition products in case of fire.

Section 11. Toxicological information

This material has not been fully tested.

Acute toxicity	No data available. Studies on a structurally related compound, pFTAA, showed no adverse effects after single IV injections in mice with doses up to 80 mg/kg.
Skin corrosion/irritation	No data available. In silico prediction showed no alerts regarding skin irritation.
Serious eye damage/irritation	No data available. In silico prediction showed no alerts regarding irritation of the eye.
Respiratory or skin sensitisation	No data available. In silico prediction showed no alerts regarding respiratory irritation or skin sensitisation.
Germ cell mutagenicity	No data available. In silico prediction showed no alerts regarding chromosome damage, mutagenicity or genotoxicity.
Carcinogenicity	No data available. In silico prediction showed no alerts regarding carcinogenicity.
Reproductive toxicity	No data available In silico prediction showed no alerts regarding modulation of androgen and oestrogen receptors, testicular toxicity, oestrogenicity, teratogenicity or developmental toxicity.

Summary of evaluation of the CMR properties: No data available.

STOT-single exposure No data available.

Repeated dose toxicity No data available.

Aspiration hazard No data available

Possible ways of exposure: May be absorbed through skin, by inhalation or by ingestion.

Potential adverse human health effects and symptoms: No data available.

Section 12. Ecological information

Aquatic toxicity No data available

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Results of PBT and vPvB assessment No data available

Other adverse effects None known

Section 13. Disposal information

Waste treatment methods: The substance and contaminated packaging material is to be considered hazardous waste. Dispose in a safe manner in accordance with local/national environmental regulations.

Section 14. Transport information

Not classified as dangerous goods in the meaning of transport regulations.

Environmental hazards: None, according to transport rules.

Special precautions for user: As this substance has not been fully tested, precaution needs to be taken in case of accidental exposure during transport.

Transport in bulk according to Annex II of MARPOL and the IBC code: Not applicable

Section 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance:
In order to comply with legal duties, it is necessary to consult local and national legislation.

Chemical safety assessment:
No Chemical Safety Assessment has been carried out for this substance.

Section 16. Other information

Revision:
This is the first version, 2021-05-14

Abbreviations:
CLP Classification, Labelling and Packaging of chemicals
PBT Persistent, Bioaccumulative, Toxic

vPvB Very Persistent, very Bioaccumulative
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

Sources of key data:

The information is based on information provided by Celluminova at the date of publishing. The information in this safety data sheet is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide.

Advice concerning training and instruction:

The substance must only be used for the intended purposes (see section 1) and by persons who have been carefully instructed and who are familiar with the contents of this safety data sheet.

Other information:

The substance has not been fully tested and there is e.g. no information about carcinogenicity, reproductive toxicity and safety during breast feeding. In connection with a workplace assessment, it must be ensured that no employees are exposed to the chemical.