

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 10µg**
- **Article number:** 070-06261
- **Registration number**
Registration numbers of the individual components: see section 3.2, if applicable.
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory chemicals
- **Uses advised against**
Only for professional use.
Do not use for private purposes (household).
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
FUJIFILM Wako Chemicals Europe GmbH
Fuggerstr. 12
41468 Neuss
Deutschland
Tel: +49 (0) 2131-311-0
Fax: +49 (0) 2131-311 100
- **Further information obtainable from:** msds_eu@fujifilm.com
- **1.4 Emergency telephone number:** +49 (0) 2131-311-0 (8h-16h)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Not applicable
- **Hazard pictograms** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free

EN

(Cont. on page 2)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

Trade name: **Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 10µg**

(Cont. from page 1)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.

(Cont. on page 3)

EN

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according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

Trade name: **Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 10µg**

(Cont. from page 2)

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 - Store only in the original receptacle.
 - Store in cool, dry conditions in well sealed receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** -20°C
- **Storage class:** 11
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
 - Wash hands before breaks and at the end of work.
 - Do not eat, drink, smoke or sniff while working.
 - Storing food in the working area is prohibited.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Hand protection**



Protective gloves

- **Material of gloves**
 - Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness ≥ 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness ≥ 0.38 mm, breakthrough time > 480 min) or neoprene (thickness ≥ 0.65 mm, breakthrough time > 240 min).
- **Eye/face protection**



Safety glasses

The protective safety glasses to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN166.

- **Body protection:** Protective work clothing

EN

(Cont. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 10µg

(Cont. from page 3)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	Solid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not applicable.

9.2 Other information

Appearance:	
Form:	Lyophilized
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Not determined.
Evaporation rate	Not applicable.

Information with regard to physical hazard classes

Explosives	Not applicable
Flammable gases	Not applicable
Aerosols	Not applicable
Oxidising gases	Not applicable
Gases under pressure	Not applicable
Flammable liquids	Not applicable
Flammable solids	Not applicable
Self-reactive substances and mixtures	Not applicable
Pyrophoric liquids	Not applicable

(Cont. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 10µg

(Cont. from page 4)

· Pyrophoric solids	Not applicable
· Self-heating substances and mixtures	Not applicable
· Substances and mixtures, which emit flammable gases in contact with water	Not applicable
· Oxidising liquids	Not applicable
· Oxidising solids	Not applicable
· Organic peroxides	Not applicable
· Corrosive to metals	Not applicable
· Desensitised explosives	Not applicable

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid**
See "Fire Fighting measures".
Protect from heat and direct sunlight.
- **10.5 Incompatible materials:** Strong oxidizing agents.
- **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Halides

SECTION 11: Toxicological information

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.

(Cont. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 10µg

(Cont. from page 5)

- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|-----------------|
| · 14.1 UN number or ID number
· ADR, IMDG, IATA | Not applicable |
| · 14.2 UN proper shipping name
· ADR, IMDG, IATA | Not applicable |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Not applicable |
| · 14.4 Packing group
· ADR, IMDG, IATA | Not applicable |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | Not applicable |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

EN
(Cont. on page 7)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 10µg

(Cont. from page 6)

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Creation Date** 14.10.2021

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· *** Data modified compared to previous version.**

EN

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Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 250µg**
- **Article number:** 074-06264
- **Registration number**
Registration numbers of the individual components: see section 3.2, if applicable.
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory chemicals
- **Uses advised against**
Only for professional use.
Do not use for private purposes (household).
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
FUJIFILM Wako Chemicals Europe GmbH
Fuggerstr. 12
41468 Neuss
Deutschland
Tel: +49 (0) 2131-311-0
Fax: +49 (0) 2131-311 100
- **Further information obtainable from:** msds_eu@fujifilm.com
- **1.4 Emergency telephone number:** +49 (0) 2131-311-0 (8h-16h)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Not applicable
- **Hazard pictograms** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free

EN

(Cont. on page 2)

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Version number 1.0

Revision: 15.10.2021

Trade name: **Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 250µg**

(Cont. from page 1)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.

(Cont. on page 3)

EN

Safety data sheet

according to 1907/2006/EC, Article 31

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Trade name: **Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 250µg**

(Cont. from page 2)

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 - Store only in the original receptacle.
 - Store in cool, dry conditions in well sealed receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** -20°C
- **Storage class:** 11
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
 - Wash hands before breaks and at the end of work.
 - Do not eat, drink, smoke or sniff while working.
 - Storing food in the working area is prohibited.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Hand protection**



Protective gloves

- **Material of gloves**
 - Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness ≥ 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness ≥ 0.38 mm, breakthrough time > 480 min) or neoprene (thickness ≥ 0.65 mm, breakthrough time > 240 min).
- **Eye/face protection**



Safety glasses

The protective safety glasses to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN166.

- **Body protection:** Protective work clothing

EN

(Cont. on page 4)

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Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 250µg

(Cont. from page 3)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	Solid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic:	Not applicable.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.
Density and/or relative density	
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not applicable.

9.2 Other information

Appearance:	
Form:	Lyophilized
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Not determined.
Evaporation rate	Not applicable.

Information with regard to physical hazard classes

Explosives	Not applicable
Flammable gases	Not applicable
Aerosols	Not applicable
Oxidising gases	Not applicable
Gases under pressure	Not applicable
Flammable liquids	Not applicable
Flammable solids	Not applicable
Self-reactive substances and mixtures	Not applicable
Pyrophoric liquids	Not applicable

(Cont. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 250µg

(Cont. from page 4)

· Pyrophoric solids	Not applicable
· Self-heating substances and mixtures	Not applicable
· Substances and mixtures, which emit flammable gases in contact with water	Not applicable
· Oxidising liquids	Not applicable
· Oxidising solids	Not applicable
· Organic peroxides	Not applicable
· Corrosive to metals	Not applicable
· Desensitised explosives	Not applicable

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid**
See "Fire Fighting measures".
Protect from heat and direct sunlight.
- **10.5 Incompatible materials:** Strong oxidizing agents.
- **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Halides

SECTION 11: Toxicological information

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.

(Cont. on page 6)

Safety data sheet

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Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 250µg

(Cont. from page 5)

- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|-----------------|
| · 14.1 UN number or ID number
· ADR, IMDG, IATA | Not applicable |
| · 14.2 UN proper shipping name
· ADR, IMDG, IATA | Not applicable |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Not applicable |
| · 14.4 Packing group
· ADR, IMDG, IATA | Not applicable |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | Not applicable |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

EN
(Cont. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

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Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 250µg

(Cont. from page 6)

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Creation Date** 14.10.2021

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· *** Data modified compared to previous version.**

EN

Safety data sheet

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Version number 1.0

Revision: 15.10.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 1mg**
- **Article number:** 076-06263
- **Registration number**
Registration numbers of the individual components: see section 3.2, if applicable.
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory chemicals
- **Uses advised against**
Only for professional use.
Do not use for private purposes (household).
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
FUJIFILM Wako Chemicals Europe GmbH
Fuggerstr. 12
41468 Neuss
Deutschland
Tel: +49 (0) 2131-311-0
Fax: +49 (0) 2131-311 100
- **Further information obtainable from:** msds_eu@fujifilm.com
- **1.4 Emergency telephone number:** +49 (0) 2131-311-0 (8h-16h)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Not applicable
- **Hazard pictograms** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free

EN

(Cont. on page 2)

Safety data sheet according to 1907/2006/EC, Article 31

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Version number 1.0

Revision: 15.10.2021

Trade name: **Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 1mg**

(Cont. from page 1)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.

(Cont. on page 3)

EN

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 1mg

(Cont. from page 2)

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Store in cool, dry conditions in well sealed receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** -20°C
- **Storage class:** 11
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke or sniff while working.
Storing food in the working area is prohibited.
- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Hand protection**



Protective gloves

- **Material of gloves**
Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness ≥ 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness ≥ 0.38 mm, breakthrough time > 480 min) or neoprene (thickness ≥ 0.65 mm, breakthrough time > 240 min).
- **Eye/face protection**



Safety glasses

The protective safety glasses to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN166.

- **Body protection:** Protective work clothing

EN

(Cont. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

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Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 1mg

(Cont. from page 3)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

· Physical state	Solid
· Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	Undetermined.
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· pH	Not applicable.
· Viscosity:	
· Kinematic viscosity	Not applicable.
· Dynamic:	Not applicable.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not applicable.
· Density and/or relative density	
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not applicable.

9.2 Other information

· Appearance:	
· Form:	Lyophilized
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Evaporation rate	Not applicable.

Information with regard to physical hazard classes

· Explosives	Not applicable
· Flammable gases	Not applicable
· Aerosols	Not applicable
· Oxidising gases	Not applicable
· Gases under pressure	Not applicable
· Flammable liquids	Not applicable
· Flammable solids	Not applicable
· Self-reactive substances and mixtures	Not applicable
· Pyrophoric liquids	Not applicable

(Cont. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 1mg

(Cont. from page 4)

· Pyrophoric solids	Not applicable
· Self-heating substances and mixtures	Not applicable
· Substances and mixtures, which emit flammable gases in contact with water	Not applicable
· Oxidising liquids	Not applicable
· Oxidising solids	Not applicable
· Organic peroxides	Not applicable
· Corrosive to metals	Not applicable
· Desensitised explosives	Not applicable

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid**
See "Fire Fighting measures".
Protect from heat and direct sunlight.
- **10.5 Incompatible materials:** Strong oxidizing agents.
- **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Halides

SECTION 11: Toxicological information

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.

(Cont. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.12.2022

Version number 1.0

Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 1mg

(Cont. from page 5)

- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|-----------------|
| · 14.1 UN number or ID number
· ADR, IMDG, IATA | Not applicable |
| · 14.2 UN proper shipping name
· ADR, IMDG, IATA | Not applicable |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Not applicable |
| · 14.4 Packing group
· ADR, IMDG, IATA | Not applicable |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | Not applicable |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

EN
(Cont. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

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Revision: 15.10.2021

Trade name: Glial Cell Line-derived Neurotrophic Factor(GDNF), Human, recombinant, Animal-derived-free 1mg

(Cont. from page 6)

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Creation Date** 14.10.2021

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· *** Data modified compared to previous version.**

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