

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name : StemBeads® GDNF

Product code : SBGD1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Research only. To be used for in vitro cell culture or in vivo research studies.

1.3. Details of the supplier of the safety data sheetStemCultures LLC.
1 Discovery Drive
Rensselaer, NY 12144
USA

Tel: 518-621-0848

1.4. Emergency telephone number

Emergency number : 1-518-621-0848

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GHS-US classification**

Not classified

2.2. Label elements**GHS-US labelling**

No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients**3.1. Substance**

Not applicable

3.2. Mixture

This product contains no substances which at their given concentration(S), are considered to be hazardous to health according to criteria of OSHA's hazards communication rule (HazCom 2012).

SECTION 4: First aid measures**4.1. Description of first aid measures**

| | |
|---------------------------------------|---|
| First-aid measures general | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. |
| First-aid measures after inhalation | : Allow victim to breathe fresh air. Allow the victim to rest. |
| First-aid measures after skin contact | : Immediately rinse with plenty of water. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists. |
| First-aid measures after ingestion | : Rinse mouth. Never give anything by mouth to an unconscious person. Obtain emergency medical attention if symptoms persist. |

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after eye contact : Contact with eye may cause physical irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures**5.1. Extinguishing media**

- Suitable extinguishing media : Use fire-extinguishing media appropriate for surrounding materials. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable or combustible
Explosion hazard : Not explosive. None of component(s) are classified as explosive or oxidizing.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

- Emergency procedures : Wear personal protective equipment. Stop leak, if possible without risk. Soak up spills with inert absorbant material and properly discard.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Stop leak, if possible without risk.
Emergency procedures : Ventilate area. Soak up spills with absorbant inert materials. If large spill occurs, use inert solids, such as clay or diatomaceous earth as soon as possible. Spilled material may be slippery.

6.2. Environmental precautions

No additional information available.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area. Keep products in properly labelled containers.
Hygiene measures : Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practices.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container. Keep container closed when not in use. Store in dry environment.
Incompatible materials : Acids. Bases.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

| Methylene chloride (75-09-2) | | |
|------------------------------|-----------------------|--------------------------------|
| ACGIH | ACGIH TWA (ppm) | 50 ppm |
| OSHA | OSHA PEL (TWA) (ppm) | 25 ppm |
| OSHA | OSHA PEL (STEL) (ppm) | 125 ppm (see 29 CFR 1910.1052) |

8.2. Exposure controls

Appropriate engineering controls

: Provide adequate ventilation.

Personal protective equipment

: Protective goggles. Gloves. Protective clothing.



Hand protection

: Wear protective gloves.

Eye protection

: Chemical goggles or safety glasses.

Respiratory protection

: In case of insufficient ventilation, wear suitable respiratory equipment.

Other information

: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|---|--|
| Physical state | : Liquid |
| Appearance | : Slurry - Suspension |
| Color | : Dark brown |
| Odor | : Odorless |
| Odor threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No applicable |
| Auto-ignition temperature | : No applicable |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No applicable |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : Water: Solubility in water of component(s) of the mixture : • Magnesium hydroxide: 0.009 g/l (at 18 °C) |
| Log Pow | : No data available |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : Not explosive |
| Oxidising properties | : No applicable |
| Explosive limits | : No applicable |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

No additional information available

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Avoid exposure to moistures.

10.5. Incompatible materials

Acids. Bases.

10.6. Hazardous decomposition products

No additional information available.

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

Acute toxicity : Not classified
(Based on available data, the classification criteria are not met)

| Methylene chloride (75-09-2) | |
|-------------------------------------|------------------------------|
| LD50 oral rat | 1600 mg/kg |
| LC50 inhalation rat (mg/l) | 53 mg/l (Exposure time: 6 h) |

Skin corrosion/irritation : Not classified
 Serious eye damage/irritation : Not classified
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified
 (Based on available data, the classification criteria are not met)

| Methylene chloride (75-09-2) | |
|--|--|
| IARC group | 2A - Probably carcinogenic to humans |
| National Toxicology Program (NTP) Status | 1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen |

Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified
 Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information**12.1. Toxicity**

| Methylene chloride (75-09-2) | |
|-------------------------------------|--|
| LC50 fish 1 | 140.8 - 277.8 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1 | 1532 - 1847 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| LC50 fish 2 | 262 - 855 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |
| EC50 Daphnia 2 | 190 mg/l (Exposure time: 48 h - Species: Daphnia magna) |

12.2. Persistence and degradability

Inherently biodegradable

12.3. Bioaccumulative potential

Does not bioaccumulate

| Methylene chloride (75-09-2) | |
|-------------------------------------|----------|
| BCF fish 1 | 6.4 - 40 |
| Log Pow | 1.25 |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No additional information available

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : This product is inherently Biodegradable.

SECTION 14: Transport information

In accordance with DOT

Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information**15.1. US Federal regulations**

| Methylene chloride (75-09-2) | |
|---|-------|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Listed on United States SARA Section 313 | |
| SARA Section 313 - Emission Reporting | 0.1 % |

15.2. International regulations**CANADA**

| | |
|---|--|
| Methylene chloride (75-09-2) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| WHMIS Classification | Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects |

EU-Regulations

No additional information available

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|--|
| Methylene chloride (75-09-2) |
| Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) |

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

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|---|
| Methylene chloride (75-09-2) |
| Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Japanese Pollutant Release and Transfer Register Law (PRTR Law) Listed on the Canadian IDL (Ingredient Disclosure List) |

15.3. US State regulations

| | | | | |
|---|---|---|---|-----------------------------------|
| Methylene chloride (75-09-2) | | | | |
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significance risk level (NSRL) |
| Yes | No | No | No | 200 µg/day |

SECTION 16: Other information

Revision date : N/A
Other information : None.

The information presented herein is believed to be correct but is not purported to be all inclusive and shall be used only as a guide. AMSPEC Chemical shall not be held liable for any damage resulting from handling or from contact with the above product.