Safety Data Sheet

Cat. # 786-217

Concanavalin A (Con A) Agarose

Size: 25ml resin
**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

### 1.1. Product identifier
- **Product form**: Mixture
- **Product name**: Concanavalin A (Con A) Agarose
- **Product code**: 263C, 133G
- **Product group**: Blend

### 1.2. Relevant identified uses of the substance or mixture and uses advised against
- **1.2.1. Relevant identified uses**: No additional information available
- **1.2.2. Uses advised against**: No additional information available

### 1.3. Details of the supplier of the safety data sheet
- Geno Technology, Inc./ G-Biosciences
  - 9800 Page Avenue
  - 63132-1429 Saint Louis - United States
  - T 800-628-7730 - F 314-991-1504
  - technical@GBiosciences.com - www.GBiosciences.com

### 1.4. Emergency telephone number
- **Emergency number**: Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

**SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

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

- Serious eye damage/eye irritation, Category H319
- 2
- Full text of H statements: see section 16

**Adverse physicochemical, human health and environmental effects**

- Causes serious eye irritation.

### 2.2. Label elements

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

- **Hazard pictograms (CLP)**: 

  ![GHS07](image-url)
Concanavalin A (Con A) Agarose
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

CLP Signal word : Warning
Hazard statements (CLP) : H319 - Causes serious eye irritation.
Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deionized water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>10 - 50</td>
<td>Not classified</td>
</tr>
<tr>
<td>manganese(II) chloride, tetrahydrate</td>
<td>(CAS-No.) 13446-34-9</td>
<td>10 - 50</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td>calcium chloride, dihydrate</td>
<td>(CAS-No.) 10035-04-8</td>
<td>10 - 50</td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>Magnesium chloride</td>
<td>(CAS-No.) 7791-18-6</td>
<td>5 - 10</td>
<td>Not classified</td>
</tr>
<tr>
<td>sodium chloride</td>
<td>(CAS-No.) 7647-14-5</td>
<td>5 - 10</td>
<td>Not classified</td>
</tr>
<tr>
<td>sodium acetate, trihydrate</td>
<td>(CAS-No.) 6131-90-4</td>
<td>0.5 - 2</td>
<td>Not classified</td>
</tr>
<tr>
<td>concanavalin A</td>
<td>(CAS-No.) 11028-71-0</td>
<td>0.5 - 2</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/effects after eye contact : Eye irritation.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture
Fire hazard : Combustible liquid.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.

Storage temperature: 4 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>United Kingdom</th>
<th>WEL TWA (mg/m³)</th>
<th>4 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium acetate, trihydrate (6131-90-4)</td>
<td>WEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>manganese(II) chloride, tetrahydrate (13446-34-9)</td>
<td>WEL TWA (mg/m³)</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment
Environmental exposure controls:
Avoid release to the environment.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Suspension</td>
</tr>
<tr>
<td>Colour</td>
<td>White to off-white</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>65 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**sodium acetate, trihydrate (6131-90-4)**

- LD50 oral rat: > 5200 mg/kg (Rat)
- LD50 dermal rabbit: > 10000 mg/kg (Rabbit)
### Section 1: Toxicological Properties

#### 1.1. Acute Toxicity

<table>
<thead>
<tr>
<th>Compound</th>
<th>Species</th>
<th>Route</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese(II) chloride, tetrahydrate (13446-34-9)</td>
<td>Rat</td>
<td>Oral</td>
<td>&gt; 3980 mg/kg bodyweight</td>
</tr>
<tr>
<td>Sodium chloride (7647-14-5)</td>
<td>Rat</td>
<td>Oral</td>
<td>&gt; 1484 mg/kg</td>
</tr>
<tr>
<td>Calcium chloride, dihydrate (10035-04-8)</td>
<td>Rabbit</td>
<td>Oral</td>
<td>&gt; 2301 mg/kg bodyweight</td>
</tr>
<tr>
<td>Magnesium chloride (7791-18-6)</td>
<td>Rat</td>
<td>Oral</td>
<td>8100 mg/kg</td>
</tr>
</tbody>
</table>

#### 1.2. Chronic Toxicity

<table>
<thead>
<tr>
<th>Compound</th>
<th>Species</th>
<th>Route</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium acetate, trihydrate (6131-90-4)</td>
<td>Fish 1</td>
<td>96h</td>
<td>100 mg/l</td>
</tr>
<tr>
<td>Manganese(II) chloride, tetrahydrate (13446-34-9)</td>
<td>Fish 1</td>
<td>168h</td>
<td>18.8 mg/l</td>
</tr>
<tr>
<td>Sodium chloride (7647-14-5)</td>
<td>Fish 1</td>
<td>96h</td>
<td>5840 mg/l</td>
</tr>
</tbody>
</table>

#### 1.3. Skin and Eye Irritancy

- Skin corrosion/irritation: Not classified
- Serious eye damage/irritation: Causes serious eye irritation.

#### 1.4. Respiratory or Skin Sensitisation

- Respiratory or skin sensitisation: Not classified

#### 1.5. Reproductive Toxicity

- Reproductive toxicity: Not classified

#### 1.6. Germ Cell Mutagenicity

- Germ cell mutagenicity: Not classified

#### 1.7. Carcinogenicity

- Carcinogenicity: Not classified

#### 1.8. Aspiration Hazard

- Aspiration hazard: Not classified

### Section 12: Ecological Information

#### 12.1. Toxicity

- Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
- Acute aquatic toxicity: Not classified
- Chronic aquatic toxicity: Not classified

#### 12.2. Persistence and Degradability

- Manganese(II) chloride, tetrahydrate (13446-34-9): Biodegradability in water: not applicable.
- Sodium acetate, trihydrate (6131-90-4): Readily biodegradable in water.
- Calcium chloride, dihydrate (10035-04-8): Biochemical oxygen demand (BOD) not applicable.
Concanavalin A (Con A) Agarose
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Biological Data</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>manganese(II) chloride, tetrahydrate (13446-34-9)</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>ThOD</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>BOD (% of ThOD)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>sodium chloride (7647-14-5)</td>
<td>Biodegradability: not applicable.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>ThOD</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>BOD (% of ThOD)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>calcium chloride, dihydrate (10035-04-8)</td>
<td>Biodegradability: not applicable.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>Not applicable (inorganic)</td>
<td></td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>Not applicable (inorganic)</td>
<td></td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>Not applicable (inorganic)</td>
<td></td>
</tr>
<tr>
<td>ThOD</td>
<td>Not applicable (inorganic)</td>
<td></td>
</tr>
<tr>
<td>BOD (% of ThOD)</td>
<td>Not applicable (inorganic)</td>
<td></td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

concanavalin A (11028-71-0)
Bioaccumulative potential: No bioaccumulation data available.

sodium acetate, trihydrate (6131-90-4)
BCF other aquatic organisms 1: 3.162 (BCFWIN, Calculated value, Anhydrous form)
Bioaccumulative potential: Low potential for bioaccumulation (BCF < 500).

manganese(II) chloride, tetrahydrate (13446-34-9)
Bioaccumulative potential: Not bioaccumulative.

sodium chloride (7647-14-5)
Log Pow: -3 (Calculated)
Bioaccumulative potential: Not bioaccumulative.

calcium chloride, dihydrate (10035-04-8)
Bioaccumulative potential: Not bioaccumulative.

Magnesium chloride (7791-18-6)
Bioaccumulative potential: No bioaccumulation data available.

12.4. Mobility in soil

sodium chloride (7647-14-5)
Surface tension: 73.03 mN/m (23 °C, 14.5 g/l)
Ecology - soil: No (test) data on mobility of the substance available.

calcium chloride, dihydrate (10035-04-8)
Ecology - soil: No (test) data on mobility of the substance available.

12.5. Results of PBT and vPvB assessment

Component

sodium chloride (7647-14-5)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

calcium chloride, dihydrate (10035-04-8)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available
**Concanavalin A (Con A) Agarose**

**Safety Data Sheet**

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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**SECTION 13: Disposal considerations**

13.1. Waste treatment methods


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**SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not regulated
UN-No. (IMDG) : Not regulated
UN-No. (IATA) : Not regulated
UN-No. (ADN) : Not regulated
UN-No. (RID) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated
Proper Shipping Name (ADN) : Not regulated
Proper Shipping Name (RID) : Not regulated

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

ADN
Transport hazard class(es) (ADN) : Not regulated

RID
Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated
Packing group (ADN) : Not regulated
Packing group (RID) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport
  Not regulated

- Transport by sea
  Not regulated

- Air transport
  Not regulated

- Inland waterway transport
  Not regulated
Concanavalin A (Con A) Agarose

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

- Rail transport
  Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
  Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

Safety Data Sheet applicable for regions: GB - United Kingdom

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.