Safety Data Sheet

Cat. # 786-802

Pearl™ Monoclonal IgG Purification Kit

Size: 1L Serum/ 0.2L Ascites
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
- Product form: Substance
- Substance name: IgG Isolation Buffer
- Product code: 0611
- Product group: Raw material

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
Not classified

Adverse physicochemical, human health and environmental effects
To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
No labelling applicable

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances
Name: IgG Isolation Buffer

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
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<tbody>
<tr>
<td>Sodium phosphate monobasic</td>
<td>(CAS-No.) 7558-80-7 (EC-No.) 231-449-2</td>
<td>100</td>
<td>Not classified</td>
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</tbody>
</table>

3.2. Mixtures
Not applicable

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 eyes with water as a precaution.
- 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
No additional information available

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
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.

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: Mechanically recover the product.
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. 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.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

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
Physical state: Solid
Colour: No data available
Odour: No data 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**
None under recommended storage and handling conditions (see section 7).

**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**
- Acute toxicity (oral) : Not classified
- Acute toxicity (dermal) : Not classified
- Acute toxicity (inhaled) : Not classified

**Sodium phosphate monobasic (7558-80-7)**
- LD50 oral rat : 8290 mg/kg (Rat, Oral)
- LD50 dermal rabbit : > 7940 mg/kg (Rabbit, Dermal)

- 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
- Reproductive toxicity : Not classified
- STOT-single exposure : Not classified
- STOT-repeated exposure : Not classified
- 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

Sodium phosphate monobasic (7558-80-7)

LC50 fish 1: > 2400 mg/l (OECD 203: Fish, Acute Toxicity Test, 48 h, Leuciscus idus)

12.2. Persistence and degradability

Sodium phosphate monobasic (7558-80-7)

Persistence and degradability: Biodegradability: not applicable.

Chemical oxygen demand (COD): Not applicable

ThOD: Not applicable

BOD (% of ThOD): Not applicable

12.3. Bioaccumulative potential

Sodium phosphate monobasic (7558-80-7)

Log Pow: -3.96 (Estimated value)

Bioaccumulative potential: Not bioaccumulative.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods


SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR): Not applicable

UN-No. (IMDG): Not applicable

UN-No. (IATA): Not applicable

UN-No. (ADN): Not applicable

UN-No. (RID): Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR): Not applicable

Proper Shipping Name (IMDG): Not applicable

Proper Shipping Name (IATA): Not applicable

Proper Shipping Name (ADN): Not applicable

Proper Shipping Name (RID): Not applicable

14.3. Transport hazard class(es)

ADR

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

IMDG

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

IATA

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

ADN

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

RID

Transport hazard class(es) (RID): Not applicable
IgG Isolation Buffer
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

14.4. Packing group
Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

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 applicable
Transport by sea
Not applicable
Air transport
Not applicable
Inland waterway transport
Not applicable
Rail transport
Not applicable

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-Registrations
No REACH Annex XVII restrictions
IgG Isolation Buffer is not on the REACH Candidate List
IgG Isolation Buffer is not on the REACH Annex XIV List
IgG Isolation Buffer is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

15.1.2. National regulations
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information
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.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

- **Product form**: Mixture
- **Product name**: Pearl IgG Purification Resin
- **Product code**: 063I
- **Product group**: Trade product

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

1.2.1. Relevant identified uses

- **Use of the substance/mixture**: Research and development

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)

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<thead>
<tr>
<th>Country</th>
<th>Organisation/Company</th>
<th>Address</th>
<th>Emergency number</th>
<th>Comment</th>
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<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Belfast Centre)</td>
<td>Grosvenor Road BT12 6BA Belfast</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Royal Victoria Hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Birmingham Centre)</td>
<td>Dudley Road B18 7QH Birmingham</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>City Hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Cardiff Centre)</td>
<td>Penarth CF64 2XX Cardiff</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gwenwyn Ward, Llandough Hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service Edinburgh</td>
<td>Little France Crescent EH16 4SA Edinburgh</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Royal Infirmary of Edinburgh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Guy's &amp; St Thomas' Poisons Unit</td>
<td>Avonley Road SE14 5ER London</td>
<td>+44 20 7188 7188</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medical Toxicology Unit, Guy's &amp; St Thomas' Hospital Trust</td>
<td></td>
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<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Newcastle Centre)</td>
<td>Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regional Drugs and Therapeutics Centre, Wolfson Unit</td>
<td></td>
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<td></td>
</tr>
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

- Not classified

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

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

- No labelling applicable

2.3. Other hazards

- No additional information available
SECTION 3: Composition/information on ingredients

<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>Resin</td>
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<td>50 - 80</td>
<td>Not classified</td>
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<tr>
<td>Deionized water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>10 - 50</td>
<td>Not classified</td>
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<tr>
<td>Sodium phosphate monobasic</td>
<td>(CAS-No.) 7558-80-7</td>
<td>0.05 - 0.5</td>
<td>Not classified</td>
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<td>sodium azide</td>
<td>(CAS-No.) 26628-22-8</td>
<td>&lt; 0.05</td>
<td>Acute Tox. 2 (Oral), H300</td>
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<td>(EC-No.) 247-852-1</td>
<td></td>
<td>Aquatic Acute 1, H410</td>
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<td></td>
<td>(EC Index-No.) 011-004-00-7</td>
<td></td>
<td>Aquatic Chronic 1, H410</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 eyes with water as a precaution.
- 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
No additional information available

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
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.

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. 
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. 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.
7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium azide (26628-22-8)

<table>
<thead>
<tr>
<th></th>
<th>EU - Occupational Exposure Limits</th>
<th>United Kingdom - Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOELV TWA (mg/m³)</td>
<td>0.1 mg/m³</td>
<td>WEL TWA (mg/m³)</td>
</tr>
<tr>
<td>IOELV STEL (mg/m³)</td>
<td>0.3 mg/m³</td>
<td>WEL STEL (mg/m³)</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>
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</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>Alcohol odour.</td>
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<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.6</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>
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<tr>
<td>Freezing point</td>
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<tr>
<td>Boiling point</td>
<td>No data available</td>
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<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
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<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
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<tr>
<td>Vapour pressure</td>
<td>No data available</td>
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<td>Relative vapour density at 20 °C</td>
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<tr>
<td>Relative density</td>
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<td>Solubility</td>
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<tr>
<td>Log Pow</td>
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<tr>
<td>Viscosity, kinematic</td>
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<tr>
<td>Viscosity, dynamic</td>
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<td>Explosive properties</td>
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<tr>
<td>Oxidising properties</td>
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</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
None under recommended storage and handling conditions (see section 7).

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Sodium phosphate monobasic (7558-80-7)

LD50 oral rat 8290 mg/kg (Rat, Oral)
LD50 dermal rabbit > 7940 mg/kg (Rabbit, Dermal)

Sodium azide (26628-22-8)

LD50 oral rat 27 mg/kg
LD50 dermal rabbit 19 - 48 mg/kg bodyweight (Rabbit, Inconclusive, insufficient data, Dermal)

Skin corrosion/irritation : Not classified
pH: 6.6

Serious eye damage/irritation : Not classified
pH: 6.6

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
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

Sodium phosphate monobasic (7558-80-7)

LC50 fish 1 > 2400 mg/l (OECD 203: Fish, Acute Toxicity Test, 48 h, Leuciscus idus)

Sodium azide (26628-22-8)

LC50 fish 1 0.8 mg/l (Equivalent or similar to OECD 203, 96 h, Gasterosteus aculeatus, Fresh water, Experimental value, Nominal concentration)
EC50 96h algae (1) 0.35 mg/l (Equivalent or similar to OECD 201, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
12.2. Persistence and degradability

**Sodium phosphate monobasic (7558-80-7)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Biodegradability: not applicable.</td>
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<tr>
<td>Chemical oxygen demand (COD)</td>
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<tr>
<td>ThOD</td>
<td>Not applicable</td>
</tr>
<tr>
<td>BOD (% of ThOD)</td>
<td>Not applicable</td>
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</tbody>
</table>

**Sodium azide (26628-22-8)**

<table>
<thead>
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<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Biodegradability in soil: not applicable. Biodegradability: not applicable.</td>
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<tr>
<td>Chemical oxygen demand (COD)</td>
<td>Not applicable (inorganic)</td>
</tr>
<tr>
<td>ThOD</td>
<td>Not applicable (inorganic)</td>
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12.3. Bioaccumulative potential

**Sodium phosphate monobasic (7558-80-7)**

<table>
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<th>Property</th>
<th>Value</th>
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<tr>
<td>Log Pow</td>
<td>-3.96 (Estimated value)</td>
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<tr>
<td>Bioaccumulative potential</td>
<td>Not bioaccumulative.</td>
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</table>

**Sodium azide (26628-22-8)**

<table>
<thead>
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<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Bioaccumulative potential</td>
<td>Not bioaccumulative.</td>
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12.4. Mobility in soil

**Sodium azide (26628-22-8)**

<table>
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<th>Property</th>
<th>Value</th>
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<tr>
<td>Ecology - soil</td>
<td>Highly mobile in soil.</td>
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods


SECTION 14: Transport information

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

14.1. UN number

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<thead>
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<th>UN-No. (ADR)</th>
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<td>UN-No. (IMDG)</td>
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<td>UN-No. (IATA)</td>
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<td>UN-No. (ADN)</td>
<td>Not regulated</td>
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<tr>
<td>UN-No. (RID)</td>
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14.2. UN proper shipping name

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<th>Proper Shipping Name (ADR)</th>
<th>Value</th>
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<td>Proper Shipping Name (IMDG)</td>
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<tr>
<td>Proper Shipping Name (ADN)</td>
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<tr>
<td>Proper Shipping Name (RID)</td>
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14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>Hazard class(es)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Not regulated</td>
</tr>
<tr>
<td>IMDG</td>
<td>Not regulated</td>
</tr>
<tr>
<td>IATA</td>
<td>Not regulated</td>
</tr>
<tr>
<td>ADN</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>
Pearl IgG Purification Resin
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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
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. 1 (Dermal)</th>
<th>Acute toxicity (dermal), Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2 (Oral)</td>
<td>Acute toxicity (oral), Category 2</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment — Acute Hazard, Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment — Chronic Hazard, Category 1</td>
</tr>
<tr>
<td>H300</td>
<td>Fatal if swallowed.</td>
</tr>
<tr>
<td>H310</td>
<td>Fatal in contact with skin.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

Safety Data Sheet applicable for regions : GB - United Kingdom

SDS EU (REACH Annex II)
5/11/2017 (Version: 1.1)
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.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form: Substance
Substance name: Ascites PreTreat-I
EC Index-No.: 607-708-00-4
EC-No.: 204-677-5
CAS-No.: 124-07-2
Product code: 354A
Type of product: Pure substance
Formula: C8H16O2
Synonyms: 1-heptanecarboxylic acid / C-8 acid / caprylic acid / heptane carboxylic acid / hexacid 898 / n-caprylic acid / neo-fat 8 / n-octoic acid / n-octylic acid / normal-caprylic acid / normal-octoic acid / normal-octylic acid / octanoic acid / octic acid / octoic acid / octylic acid
Product group: Trade product
BIG No: 11138

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

1.2.1. Relevant identified uses

Use of the substance/mixture: Dyestuff/pigment: intermediate product
Pharmaceutical intermediate
Cosmetic product: intermediate product

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)

<table>
<thead>
<tr>
<th>Country</th>
<th>Organisation/Company</th>
<th>Address</th>
<th>Emergency number</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Belfast Centre) Royal Victoria Hospital</td>
<td>Grosvenor Road BT12 6BA Belfast</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Birmingham Centre) City Hospital</td>
<td>Dudley Road B18 7QH Birmingham</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Cardiff Centre) Gwennywn Ward, Llandough Hospital</td>
<td>Penarth CF64 2XX Cardiff</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service Edinburgh Royal Infirmary of Edinburgh</td>
<td>Little France Crescent EH16 4SA Edinburgh</td>
<td>0344 892 0111</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Guy’s &amp; St Thomas’ Poisons Unit Medical Toxicology Unit, Guy’s &amp; St Thomas’ Hospital Trust</td>
<td>Avonley Road SE14 5ER London</td>
<td>+44 20 7188 7188</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit</td>
<td>Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle</td>
<td>0344 892 0111</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 1C H314
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412

Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects
Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP):

- GHS05

CLP Signal word:
Danger

Hazard statements (CLP):
- H314 - Causes severe skin burns and eye damage.
- H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP):
- P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 - Wash hands, forearms and face thoroughly after handling.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 - Immediately call a POISON CENTER or doctor.
- P321 - Specific treatment (see supplemental first aid instruction on this label).
- P405 - Store locked up.
- P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards
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

SECTION 3: Composition/information on ingredients

3.1. Substances
Substance type: Mono-constituent

<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>Ascites PreTreat-I</td>
<td>(CAS-No.) 124-07-2 (EC-No.) 204-677-5 (EC Index-No.) 607-708-00-4</td>
<td>100</td>
<td>Skin Corr. 1C, H314 Aquatic Chronic 3, H412</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

3.2. Mixtures
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures


First-aid measures after inhalation: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
### First-aid measures after skin contact

Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.

### First-aid measures after eye contact

Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist.

### First-aid measures after ingestion


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

#### Symptoms/effects after inhalation

EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract.

#### Symptoms/effects after skin contact

Caustic burns/corrosion of the skin.

#### Symptoms/effects after eye contact

Corrosion of the eye tissue.

#### Symptoms/effects after ingestion

Burns to the gastric/intestinal mucosa. Possible esophageal perforation.

#### Chronic symptoms

No effects known.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media**

- Quick-acting ABC powder extinguisher.
- Quick-acting BC powder extinguisher.
- Quick-acting class B foam extinguisher.
- Quick-acting CO2 extinguisher.
- Class B foam (not alcohol-resistant).

**Unsuitable extinguishing media**

- Water (quick-acting extinguisher, reel); risk of puddle expansion.
- Water; risk of puddle expansion.

#### 5.2. Special hazards arising from the substance or mixture

**Fire hazard**

- DIRECT FIRE HAZARD: Combustible.
- INDIRECT FIRE HAZARD: Temperature above flashpoint: higher fire/explosion hazard.

**Explosion hazard**

- INDIRECT EXPLOSION HAZARD: Reactions with explosion hazards: see "Reactivity Hazard".

**Hazardous decomposition products in case of fire**

- Toxic fumes may be released.

#### 5.3. Advice for firefighters

**Precautionary measures fire**

- Exposure to fire/heat: keep upwind.
- Exposure to fire/heat: consider evacuation.
- Exposure to fire/heat: seal off low-lying areas.
- Exposure to fire/heat: have neighbourhood close doors and windows.

**Firefighting instructions**

- Cool tanks/drumms with water spray/remove them into safety. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

**Protection during firefighting**

- Heat/fire exposure: compressed air/oxygen apparatus.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**6.1.1. For non-emergency personnel**


**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**

Prevent soil and water pollution. Prevent spreading in sewers.

#### 6.3. Methods and material for containment and cleaning up

- For containment: Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Heat exposure: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.

- Methods for cleaning up: Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

**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:
- Keep away from naked flames/heat. In finely divided state: use spark-explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep container tightly closed.

Hygiene measures:
- Wash contaminated clothing before reuse. 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 locked up. Store in a well-ventilated place. Keep cool.

Heat and ignition sources:
- KEEP SUBSTANCE AWAY FROM: heat sources.

Information on mixed storage:
- KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) bases.

Storage area:
- Keep out of direct sunlight. Store in a dry area. Ventilation at floor level. Keep locked up. Provide for a tub to collect spills. Meet the legal requirements.

Special rules on packaging:
- SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Ascites PreTreat-I (124-07-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL/DMEL (Workers)</td>
<td></td>
</tr>
<tr>
<td>Long-term - systemic effects, dermal</td>
<td>10 mg/kg bw/day</td>
</tr>
<tr>
<td>Long-term - systemic effects, inhalation</td>
<td>17.632 mg/m³</td>
</tr>
<tr>
<td>DNEL/DMEL (General population)</td>
<td></td>
</tr>
<tr>
<td>Long-term - systemic effects, oral</td>
<td>2.5 mg/kg bw/day</td>
</tr>
<tr>
<td>Long-term - systemic effects, inhalation</td>
<td>4,348 mg/m³</td>
</tr>
<tr>
<td>PNEC (Water)</td>
<td></td>
</tr>
<tr>
<td>PNEC aqua (freshwater)</td>
<td>0.007 mg/l</td>
</tr>
<tr>
<td>PNEC aqua (marine water)</td>
<td>0.001 mg/l</td>
</tr>
<tr>
<td>PNEC (Sediment)</td>
<td></td>
</tr>
<tr>
<td>PNEC sediment (freshwater)</td>
<td>0.074 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC sediment (marine water)</td>
<td>0.007 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (Soil)</td>
<td></td>
</tr>
<tr>
<td>PNEC soil</td>
<td>0.011 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (Oral)</td>
<td></td>
</tr>
<tr>
<td>PNEC oral (secondary poisoning)</td>
<td>66.66 mg/kg dwt</td>
</tr>
<tr>
<td>PNEC (STP)</td>
<td></td>
</tr>
<tr>
<td>PNEC sewage treatment plant</td>
<td>912 mg/l</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

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

Materials for protective clothing:
- GIVE GOOD RESISTANCE: neoprene. nitrile rubber. viton. GIVE POOR RESISTANCE: butyl rubber. natural rubber. PVC

Hand protection:
- Gloves

Eye protection:
- Face shield
Skin and body protection:
Corrosion-proof clothing

Respiratory protection:
High gas/vapour concentration: full face mask with filter type A

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>Liquid</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>144.21 g/mol</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless to light yellow.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>3.6 (0.068 %)</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>16 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>237 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>132 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>440 °C</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>0.0049 hPa (25 °C)</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>5</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.91</td>
</tr>
<tr>
<td>Density</td>
<td>909 kg/m³</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water. Soluble in methanol. Soluble in ethanol. Soluble in ether. Soluble in acetic acid. Soluble in chloroform. Soluble in petroleum spirit. Soluble in carbondisulfide. Water: 0.068 g/100ml Ethanol: complete</td>
</tr>
<tr>
<td>Log Pow</td>
<td>3.05 (Experimental value)</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>6.271 mm²/s</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>5.7 mPa·s (20 °C)</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

Specific conductivity             : < 37 pS/m
VOC content                       : 0 %
Other properties                  : Gas/vapour heavier than air at 20°C. Slightly volatile. Acid reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity
Violent to explosive reaction with (strong) oxidizers. Violent exothermic reaction with (strong) bases: pressure rise and possible bursting of container.

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
None under recommended storage and handling conditions (see section 7).

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>Effect</th>
<th>Classification</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>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>pH: 3.6 (0.068 %)</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Serious eye damage, category 1, implicit</td>
</tr>
<tr>
<td>pH: 3.6 (0.068 %)</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**Ascites PreTreat-I (124-07-2)**

- **Viscosity, kinematic**: 6.271 mm²/s
- **Potential adverse human health effects and symptoms**: Causes severe skin burns. Causes serious eye damage.

### SECTION 12: Ecological information

#### 12.1. Toxicity

- **Ecology - general**: Harmful to aquatic life with long lasting effects.
- **Ecology - air**: Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
- **Ecology - water**: Harmful to crustacea with long lasting effects. Harmful to fishes. Harmful to algae. pH shift.
- **Acute aquatic toxicity**: Not classified
- **Chronic aquatic toxicity**: Harmful to aquatic life with long lasting effects.

**Ascites PreTreat-I (124-07-2)**

- **LC50 fish 1**: 22 mg/l (US EPA, 96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value)
- **EC50 Daphnia 1**: > 20 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Read-across, GLP)
- **EC50 72h algae (1)**: 31 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

#### 12.2. Persistence and degradability

**Ascites PreTreat-I (124-07-2)**

- **Persistence and degradability**: Readily biodegradable in water.
- **Biochemical oxygen demand (BOD)**: 1.27 g O₂/g substance

#### 12.3. Bioaccumulative potential

**Ascites PreTreat-I (124-07-2)**

- **BCF fish 1**: 234 - 288 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Danio rerio, Flow-through system, Fresh water, Read-across)
- **Log Pow**: 3.05 (Experimental value)
- **Bioaccumulative potential**: Low potential for bioaccumulation (Log Kow < 4).

#### 12.4. Mobility in soil

**Ascites PreTreat-I (124-07-2)**

- **Surface tension**: 0.024 N/m (70 °C)
- **Log Koc**: 1.84 (log Koc, SRC PCKOCWIN v2.0, QSAR)
- **Ecology - soil**: Highly mobile in soil.
12.5. Results of PBT and vPvB assessment

Ascites PreTreat-I (124-07-2)

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods


Product/Packaging disposal recommendations: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized incinerator with energy recovery.


European List of Waste (LoW) code: 15 01 10* - packaging containing residues of or contaminated by dangerous substances

16 03 05* - organic wastes containing dangerous substances

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): UN 3265
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): Corrosive liquid, acidic, organic, n.o.s.
Proper Shipping Name (RID): Not regulated

Transport document description (ADN): UN 3265 Corrosive liquid, acidic, organic, n.o.s., 8, III

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): 8
Danger labels (ADN): 8

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): III

14.5. Transport document description

Transport document description: As required by law
Ascites PreTreat-I
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Packing group (RID) : Not regulated

14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : Yes (IMDG only)
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
Classification code (ADN) : C3
Carriage permitted (ADN) : T

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
No REACH Annex XVII restrictions
Ascites PreTreat-I is not on the REACH Candidate List
Ascites PreTreat-I is not on the REACH Annex XIV List
Ascites PreTreat-I is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

VOC content : 0 %

15.1.2. National regulations
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Chronic 3 Hazardous to the aquatic environment — Chronic Hazard, Category 3
Skin Corr. 1C Skin corrosion/irritation, Category 1C
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.

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 therefore be construed as guaranteeing any specific property of the product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

- Product form: Mixture
- Product name: Ascite PreTreat-II
- Product code: 356A
- Product group: Trade product

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 - P 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]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

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>Water, Nuclease free</td>
<td>(CAS-No.) 7732-18-5 (EC-No.) 231-791-2</td>
<td>50 - 80</td>
<td>Not classified</td>
</tr>
<tr>
<td>sodium chloride</td>
<td>(CAS-No.) 7647-14-5 (EC-No.) 231-598-3</td>
<td>10 - 50</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

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 eyes with water as a precaution.
- 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

No additional information available

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
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.

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. 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. 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.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

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
Physical state: Liquid
Colour: No data available
Odour: No data available
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
None under recommended storage and handling conditions (see section 7).

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
Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

sodium chloride (7647-14-5)

LD50 oral rat : > 3980 mg/kg bodyweight (Rat, Experimental value, 20% aqueous solution, Oral)
LD50 dermal rabbit : > 10000 mg/kg (Rabbit, Experimental value, Dermal)
LC50 inhalation rat (mg/l) : > 42 mg/l air (1 h, Rat, Male, Experimental value, 20% aqueous solution, Inhalation (aerosol))

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
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
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

sodium chloride (7647-14-5)

LC50 fish 1: 5840 mg/l (ASTM, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value)

12.2. Persistence and degradability

sodium chloride (7647-14-5)

Persistence and degradability: Biodegradability: not applicable.

Chemical oxygen demand (COD): Not applicable

ThOD: Not applicable

BOD (% of ThOD): Not applicable

12.3. Bioaccumulative potential

sodium chloride (7647-14-5)

Log Pow: -3 (Calculated)

Bioaccumulative potential: Not bioaccumulative.

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.

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

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods


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
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
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.