Material Safety Data Sheet

Recombinant Human Tropoelastin

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1. PRODUCT INFORMATION

1.1 Product name  recombinant human Tropoelastin

Product number  TE0001, TE0005, TE0010

1.2 Usage  laboratory chemicals, manufacture of substances

1.3 Manufacturer  PolyQuant GmbH
Industriestr. 1
93077 Bad Abbach
Germany

Supplier  PolyQuant GmbH
Industriestr. 1
93077 Bad Abbach
Germany

1.4 Emergency Tel.  PolyQuant GmbH  Mo-Fr: 9-17  +49 9405 96 999 10
Poisons Information Centre Munich  +4989 19240

2. HAZARDS IDENTIFICATION

2.1 Classification of substance  Not a hazardous substance according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

2.2 Labeling  The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards  none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance  recombinant human Tropoelastin  approx. 100% (w/w)

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation  Remove from source of exposure. If not breathing, give artificial respiration.

Skin contact  Wash off with soap and flush with copious amounts of water.

Eye contact  Check for contact lenses and remove if present. Flush eyes with water.

Ingestion  Never give anything by mouth to an unconscious person. Rinse mouth with water. If signs of toxicity occur, seek medical attention.
4.2 Most important symptoms and effects, both acute and delayed
None known

4.3 Indication of any immediate medical attention and special treatment needed
No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing Media
Water spray, carbon dioxide, dry chemical foam.

5.2 Unusual fire and explosion hazards
As with any organic material, this product may produce toxic carbon monoxide and dioxide fumes if heated to decomposition and airborne dust may present an explosion hazard.

5.3 Advice for firefighters
No special provisions required beyond normal firefighting equipment such as flame and chemical resistant clothing and self-contained breathing apparatus.

5.4 Further information
No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear appropriate protective clothing and gloves.
Avoid dust formation. Avoid breathing vapors, mist or gas.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
Dispose of material in accordance with all applicable Federal, State and local regulations.
Refer to Section 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed.
7.2 Conditions for safe storage, including any incompatibilities

- Protect from moisture exposure.
- Recommended storage temperature: -20 °C

7.3 Specific end uses

- No data available

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Eye/face protection

- Either safety glasses or goggles should be worn.

Skin protection

- Handle with gloves to prevent skin contact.
- Wash and dry hands.

Body Protection

- Sensitive individuals should wear dust masks/respirators, protective gloves, eye protection, lab coat, apron or other protective clothing to minimize contact.

Respiratory protection

- Respiratory protection is not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Physical State</td>
<td>White to tan powder</td>
</tr>
<tr>
<td>Odour</td>
<td>N/A</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting point/Freezing point</td>
<td>N/A</td>
</tr>
<tr>
<td>Initial Boiling Point/Boiling Point Range</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>N/A</td>
</tr>
<tr>
<td>Upper/Lower Flammability or Explosive Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapour Density (Air =1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>N/A</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

10.1 Reactivity  
no data available

10.2 Chemical stability  
no data available

10.3 Possibility of hazardous reactions  
no data available

10.4 Conditions to avoid  
High temperature; ionizing radiation

10.5 Incompatible materials  
Strong oxidizing agents

10.6 Hazardous decomposition products  
Product may produce toxic carbon monoxide and dioxide fumes if heated to decomposition and airborne dust may present an explosion hazard. Hazardous Polymerization is not anticipated.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>no data available</td>
</tr>
<tr>
<td>Dermal corrosion/irritation</td>
<td>no data available</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>no data available</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>no data available</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>no data available</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>no data available</td>
</tr>
<tr>
<td>Specific target organ toxicity</td>
<td>no data available</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>no data available</td>
</tr>
</tbody>
</table>

Potential health effects:

- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Ingestion: May be harmful if swallowed.
- Skin: May be harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.

12. ECOLOGICAL INFORMATION

12.1 Toxicity  
not determined

12.2 Persistence and degradability  
not determined
12.3 Bioaccumulative potential not determined
12.4 Mobility in soil not determined
12.5 Results of PBT and vPvB assessment no data available
12.6 Other adverse effects no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Offer surplus and non-recyclable solutions to a licensed disposal company.

14. TRANSPORT INFORMATION

14.1 UN number Not listed
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) N/A
14.4 Packaging group N/A
14.5 Environmental hazards N/A
14.6 Special precautions for user no data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available
15.2 Chemical Safety Assessment no data available

16. OTHER INFORMATION

Disclaimer:
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. PolyQuant GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.