“SynBiosys® is a safe, versatile, biodegradable polymer platform applicable for sustained release formulations of API’s from days to months”

The SynBiosys polymers are multi-block copolymers composed of building blocks lactide, glycolide, ε-caprolactone and polyethyleneglycol.

<table>
<thead>
<tr>
<th>Original compound</th>
<th>Degradation products</th>
<th>Excreted as</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactide</td>
<td>lactic acid</td>
<td>CO₂ and H₂O</td>
<td></td>
</tr>
<tr>
<td>Glycolide</td>
<td>Glycolic acid</td>
<td>CO₂ and H₂O</td>
<td></td>
</tr>
<tr>
<td>Caprolactone</td>
<td>hydroxy hexanoic acid</td>
<td>hydroxy hexanoic acid</td>
<td></td>
</tr>
<tr>
<td>Polyethylene glycol (PEG)</td>
<td>PEG</td>
<td>PEG</td>
<td></td>
</tr>
<tr>
<td>Butanediisocyanate (BDI)</td>
<td>Butanediame (putrescine), CO₂ and H₂O</td>
<td>Butanediame, CO₂ and H₂O</td>
<td></td>
</tr>
<tr>
<td>Butanediol (BDO)</td>
<td>Butanediol</td>
<td>Butanediol</td>
<td></td>
</tr>
</tbody>
</table>

- Safe to use polymers
- Well known building blocks
- Biodegradable
- Urinary excretion

“SynBiosys® has endless versatility”

- Ample choice of building blocks in the multi-block copolymer
- Endless possibilities to fine tune water-swellability, polymer degradation and API release
- SynBiosys is designed to fit the purpose

Example SynBiosys structure:
SynBiosys based sustained release formulations

“SynBiosys® shows excellent release performance”

SynBiosys’ versatility and water-swellability enable sustained release.

- From days to months
- Supporting small molecules, peptides and specially proteins
- By diffusion, thus without lag phase
- Limited or no burst of API

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