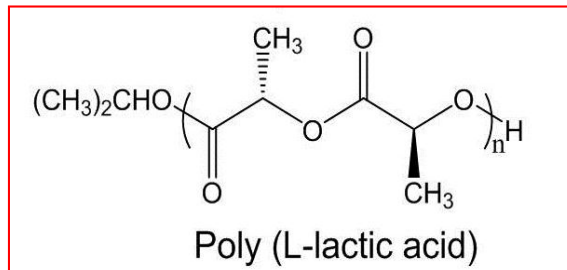


# Fibres for medical applications

## Module 6: FAQ

Q1. Write the Structure of one biodegradable polymer

Ans:



Q2. What are superabsorbent polymers?

Ans: **Super Absorbent Polymers (SAP)** are polymers that can absorb and retain extremely large amounts of a liquid relative to their own mass

Q3. Explain the key properties of super absorbent polymers that govern their performance in infant diapers?

Ans:

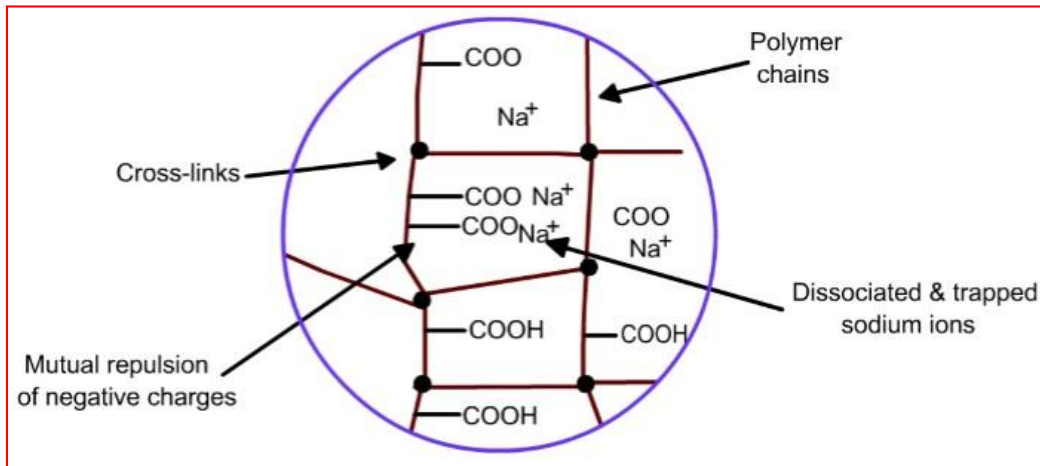
- Exertion of pressure doesn't causes the fluid to come out
- SAP remains insoluble in the fluid it absorbs

Q4. Suggest two monomers for preparation of a superabsorbent polymers(SAP) .

Ans: Partially neutralized acrylic acid or sodium polyacrylate.

Q5. Draw a sketch of SAP that shows the chemical nature/ bonds

Ans:



Q6. What are the two most critical performance properties required for use of superabsorbents in:

- Medical bandages:
- Agriculture

Ans:

- For Medical Bandages: Absorption rate should be high as immediate absorption of body fluid is required. Ease of formation of soft products with different shapes to fit the surface of the wound or body.
- For Agriculture: Swelling Capacity should be high as it will help in trapping more amount of water for the crop/vegetation.

Long Life: should not be affected by microbes