"Chemistry and technology of polymers"

1. The concept of polymers.
2. polyvinyl alcohol

3. Determine the conditional diameter of the fiber after drawing. Thread number before drawing 50, number of fibers in the thread 30, drawing ratio 3.5

3. Classification of polymers

4. Polyvinyl alcohol properties and applications.

5. Determine the fiber thickness in denier. Thread number 100, number of fibers 60.

Polymerization.

Polyamides and their properties.

3. Determine the fiber denier. Thread number 200, number of fibers 60.

Polymerization.

The concept of polyesters

Determine the conditional diameter of the fiber after drawing. The thread number before drawing is 40, the number of fibers in the thread is 26, the drawing ratio is 3.

Polycondensation.

polyvinyl alcohol.

Determine the fiber thickness in denier. Thread number 200, number of fibers 40.

Heteropolycondensation . Homonolicondensation .

Polyesters.

Determine the productivity of a machine that produces cellophane. a \u003d 65g; v = 70 m/min; η=0.85; L = 2.4m; k5 = 0.55

1.Polycondensation .

2.Polyetherlarniproperties,

3. Determine the performance of the machine that produces cellophane.

a = 45g; v = 50 m/min; η=0.90; L = 2.4m; k5 = 0.55

Polyethylene . With raw materials , obtaining, application .

polyvinyl alcohol. Raw materials, obtaining , application .

Determine the conditional diameter of the fiber after drawing. Thread number before drawing 30, number of fibers in the thread 30, drawing ratio 3.5

1.Polyethylene properties. polymerization mechanism.

2. Polymerization and polycondensation.

3. Determine the conditional diameter of the fiber after drawing. Thread number before drawing 25, number of fibers per thread 28, drawing ratio 3.2

1.Polypropylene . Obtaining, properties, application.

2. Polyvinyl alcohol properties and applications.

3. Determine the conditional diameter of the fiber after drawing. Thread number before drawing 24, number of fibers in the thread 20, drawing ratio 3.4

Polyacrylonitrile.

Polyamides. Raw materials, obtaining, application.

Determine the conditional diameter of the fiber after drawing. Thread number before drawing 40, number of fibers in the thread 22, drawing ratio 3.5.

Polyacrylonitrile properties , preparation and application.

Polyamides . Obtaining, properties, application.

Determine the productivity of a machine that produces cellophane.

a \u003d 85g; v = 90 m/min; η=0.85; L = 2.4m; k5 = 0.55

Polyamides. Name of polyamides, application.

Classification of polymers

3. Determine the conditional diameter of the fiber after drawing. The thread number before drawing is 26, the number of fibers in the thread is 24, the drawing ratio is 3.

polymerization and polycondensation.

Polyesters. Receipt, application.

3. Determine the conditional diameter of the fiber after drawing. Thread number before drawing 40, number of fibers in the thread 22, drawing ratio 3.5.

1. Classification of polymers.

2. Polyesters . Simple , complex polyesters and their application.

3. Determine the conditional diameter of the fiber after drawing. The thread number before drawing is 35, the number of fibers in the thread is 28, the drawing ratio is 3.

Polyesters . With raw materials for production.

Classification of polymers

3. Determine the performance of the machine that produces cellophane.

a = 62 g; v = 56 m/min; η=0.88; L = 2.4m; k5 = 0.55

1. Classification of polymers

2. Polyvinyl alcohol. Getting, application, properties.

3. Determine the performance of the machine that produces cellophane.

a \u003d 72g; v = 73 m/min; η=0.87; L = 2.4m; k5 = 0.5

1. The concept of polymers. Classification of polymers.

2. Polyvinyl alcohol. Properties and application.

3. Determine the performance of the machine that produces cellophane.

a \u003d 56g; v = 60 m/min; η=0.89; L = 2.4m; k5 = 0.54

1. Scheme of the polymerization process.

2.Polyamides. Obtaining, properties, application.

3. Determine the conditional diameter of the fiber after drawing. The thread number before drawing is 30, the number of fibers in the thread is 25, the drawing ratio is 3.

1. Obtaining polymers . Polymerization , polycondensation .

2. The concept of polyesters. Receipt and application.

3. Determine the performance of the machine that produces cellophane.

a \u003d 46g; v = 64 m/min; η=0.87; L = 2.4m; k5 = 0.56

1.Polycondensation.

2.Polyesters. Obtaining, properties, application.

3. Determine the performance of the machine that produces cellophane.

a \u003d 87g; v = 80 m/min; η=0.85; L = 2.4m; k5 = 0.55

1Heteropolycondensation and homonolycondensation .

2. Polyvinyl alcohol. Raw materials for obtaining, application.

3. . Determine the conditional diameter of the fiber after drawing. Thread number before drawing 42, number of fibers in the thread 18, drawing ratio 3.5.

1.Polycondensation.

olicaprolactam. Raw materials, production, application.

3 . Determine the conditional diameter of the fiber after drawing. Thread number before drawing 40, number of fibers in the thread 22, drawing ratio 3.5.

Polyethylene . With raw materials , obtaining, application.

Polyesters. Raw materials, obtaining, application.

Determine the conditional diameter of the fiber after drawing. Thread number before drawing 45, number of fibers in the thread 16, drawing ratio 3.2.

1. Polyethylene and polypropylene.

2. Classification of polymers

3. Determine the performance of the machine that produces cellophane.

a \u003d 68g; v = 46 m/min; η=0.88; L = 2.4m; k5 = 0.55

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1. Polyacrylonitrile . Raw material properties and applications.

2. Polyvinyl alcohol. Properties and application.

3. Determine the fiber denier. Thread number 90, number of fibers 50

1. Polyacrylonitrile . With properties, obtaining, application.

2.Polyamides.

3. . Determine the productivity of a machine that produces cellophane.

a \u003d 77g; v = 88 m/min; η=0.85; L = 2.4m; k5 = 0.5

1.Polyacrylonitrile. Raw materials, properties , application.

2.Polyamides . With raw materials, properties, production and application.

3. Determine the fiber denier. Thread number 120, number of fibers 40.

1. The concept of polymers. Classification.

2. Scheme of the polymerization process.

3. . Determine the productivity of a machine that produces cellophane.

a \u003d 85g; v = 83 m/min; η=0.8; L = 2.4m; k5 = 0.5

1.Polymerization and polycondensationlanish .

2. Polyesters. Polyurethanes.

3. Determine the conditional diameter of the fiber after drawing. Thread number before drawing 30, number of fibers in the thread 30, drawing ratio 3.5