

가 (2)

III.

가 ,
 ,
 .
 . 가
 가 . Glaeser(6) , ,
 .
 Polyurethane ,
 . Styrene-maleic acid
 . acrylic copolymer ,
 comonomer acrylonitrile acrylamide 가
 styrene 가 .
 .
 , 가 .
 가 .
 , 가
 . 가
 .
 Acryl 가
 .
 .

[illegible]

ball

drop wire

drop wire

.

, slashing

.

,

,

, slasher

,

,

.

가

.

가

,

.

.

IV. 가 (formular)

1. 가

가

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,

,

,

.

,

가

.

1-1

93-94% Cellulose

, pectin, wax,

.

가 1-5Cm

(convoluted)

. , .
 1.54 .
 , 120°C , 가 .
 가 .
 ,
 , .
 65% RH, 20°C .

Tenacity, dry (g/denier)	3.0-4.9
Wet tenacity (% of dry)	100-110
Tensile strength (PSI $\times 10^3$)	60-120
Elongation at break (%)	3-11
Elastic recovery (% recovery)	75-45
Stiffness (g/denier)	57-60
Moisture regain (%)	7.0-8.5

 가 .
 cellulose 가
 , , 30%
 , CMC,
 가 PVA .
 2
 staple .
 가 , 150°C 가
 가 peptide

alkali disulfide ,

alkali .

1.32 . 65% RH, 20°C

.

Tenacity, dry (g/denier)	1.0-2.0
Wet tenacity (% of dry)	78-90
Tensile strength (PSI x 10 ³)	17-29
Elongation at break (%)	20-40
Elastic recovery (% recovery)	99-65
Stiffness (g/denier)	3-9
Moisture regain (%)	11-17

가 , 10% 가

가 . 가 , 가

.

,

, 가 PVA acrylic .

1-2

Nylon

nylon 6 nylon 66 .

4.2% , alkali . Nylon

, . Nylon

23-46% . ,

가 . phenol .

1.14 20°C, 65% RH

	Nylon 6			Nylon 66		
	Filament (regular)	Filament (high ten.)	Staple	Filament (regular)	Filament (high ten.)	Staple
Tenacity, dry g/denier	4.1-5.8	7.4-8.2	2.6-6.0	3.0-6.0	7.4-8.3	4.4-6.6
Wet tenacity (% of dry)	85-90	85-90	85-90	85-90	85-90	85-90
Tensile strength (PSI×10 ³)	60-85	110-122	55-86	65-84	110-122	62-68
Elongation at break (%)	25-40	16-22	34-60	25-40	16-22	23-58
Elastic recovery (%)	100	-	-	100	100	-

nylon

Polyamide acrylic

polyamide filament staple 가 CMC

PVA binder 가 가 polyacrylic acid ,

가 PVA 가

acrylic copolymer .

Polyester
polyester
polyester 250
가 meta-cresol, ortho-chlorophenol, trifluoroacetic acid . Polyester
1.38 20 , 65%RH

	Filament (regular)	Filament (high tenacity)	staple
Tenacity, dry (g/denier)	4.5-5.0	6.4-6.7	5.5-6.4
Wet tenacity(% of dry)	100	100	100
Tensile strength (PSI × 103)	80-88	104-160	88-118
Elongation at break (%)	19-24	11-13	20-28
Elastic recovery (% recovery)	97-80	100-100	-
Moisture regain(%)	-	0.4-0.8	-

Polyester 가
가
polyester
가 . Polyesterk
polyester polyglycol , PVA, CMC, acrylate

polyester , acrylic copolymer maleic anhydride
ethyl vinyl ether copolymer polyurethane .

Modacrylycs

comonomer acrylonitrile copolymer
. Modacrylics , , alkali,
.
acetone
.

Modacrylics ,
. Modacrylics .

1.28~1.38 20 , 65%RH .

Tenacity dry(g/denier)	2.4-3.1
Wet tenacity(% of dry)	100
Tensile strength(10 ³ PSI)	43-50
Elongation at break (%)	32-41
Elastic recovery (% recovery)	78-97
Moisture regain(%)	0.4-4.4

가

가 . 가

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