



- Knit elastic with silicone yarns as elastanes
- Autoclave resistance
- Knit elastic keeps its stretch-resistance in a high temperature condition, as well as a below-freezing temperature condition
- The quality won' t be changed after long term usage in seawater and chlorinated water

**<Examples of usage>**

**How to use:** Use for the inside covered with the main body fabric

**Where to use:** sleeves, hem, waist, etc. to fit your body

**Silicone knitted elastic**

**ISP-SC04G**

Polyester 100%  
with silicone yarn



•Autoclave processing machine



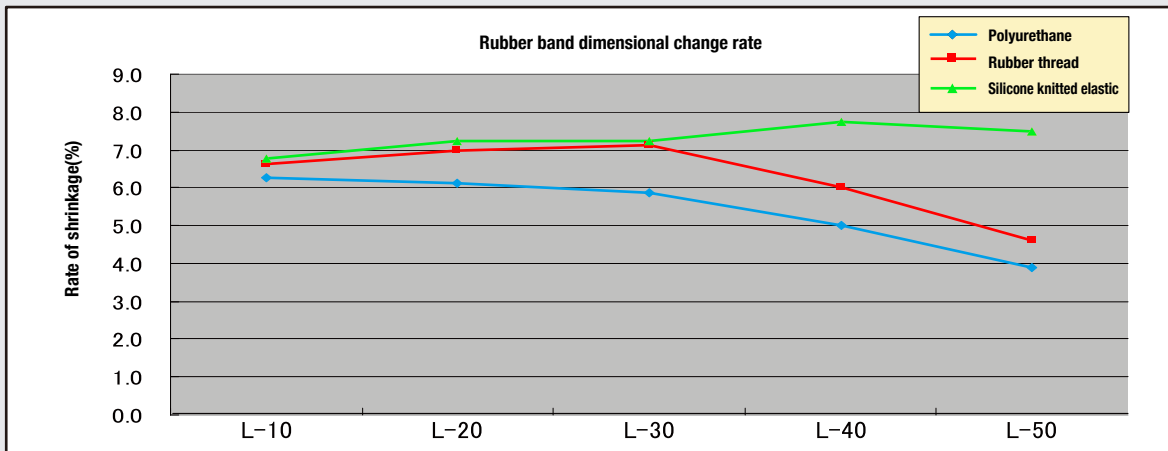
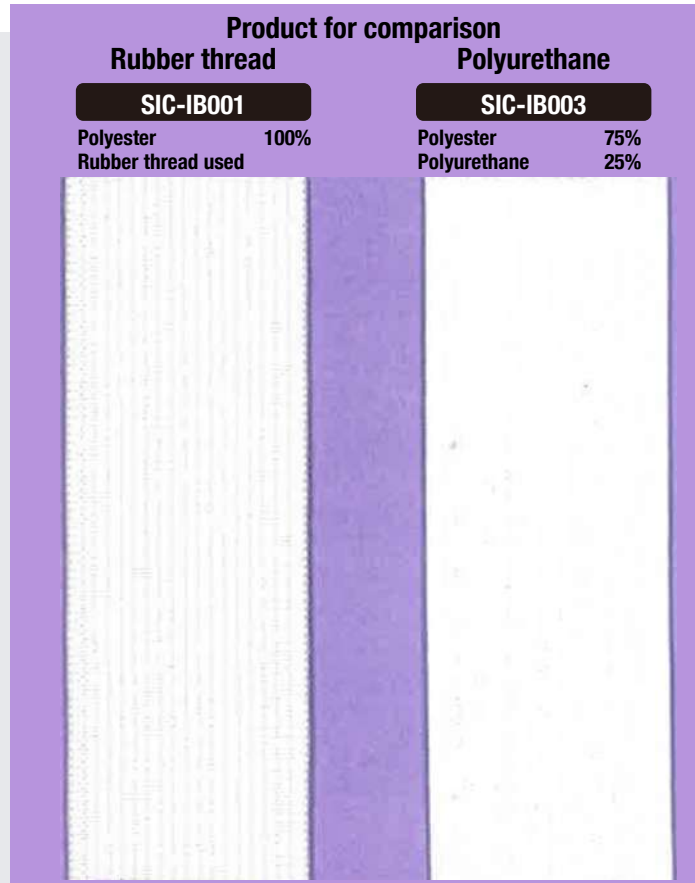
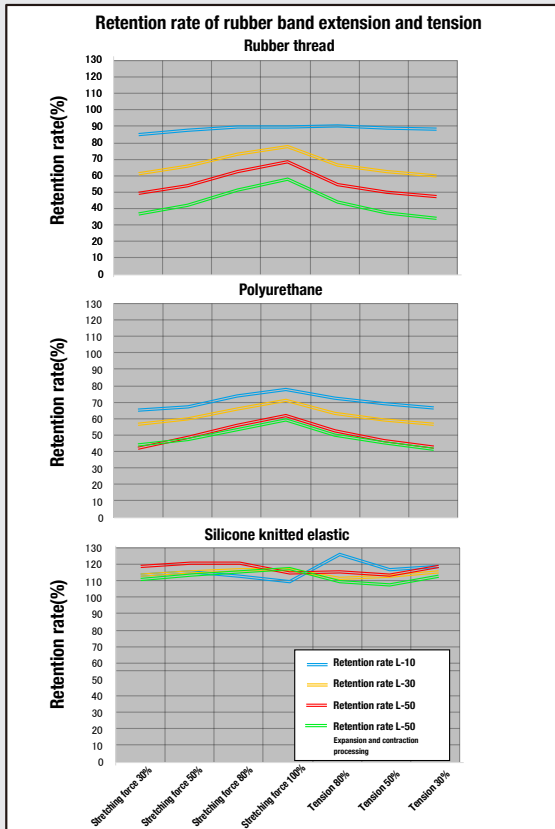
•Isolation gown



•Image of sub-zero durable clothing



•Image of protective clothing



Looking at the retention rate of the stretch force and tension force of the rubber band, the difference between the 100% stretch force of 10 cycle treatment (L-10) and the retention rate of 100% stretch force after 50 cycle treatment (L-50) is The larger one is rubber thread> polyurethane> silicone. From this phenomenon, the more the rubber treated, the lower the retention rate, and the height difference of the fold line of the elongation force and the tension force is large, but the silicone knitted elastic is stable at around 120%. The cause of this phenomenon is that the retention rate after 50 cycles of treatment (L-50) is 100% elongation, which is deteriorated to 61.8% polyurethane and 68.0% rubber thread, but 114% silicone. Rather, the elongation power is increasing. Considering whether the retention rate of the silicone knitted elastic exceeds 100%, no deterioration phenomenon was observed in the silicone knitted elastic, and the elongation force increased by the amount of shrinkage from the 10-cycle treatment (L-10). It is considered to be.

[ Test method ]

(1) Autoclave treatment / 121 ° C x 30 minutes

(2) Water wash treatment / JIS L 0217 Method 103

(3) Stretch treatment / Tester used: Do Mattie Type Repeat Endurance Tester, Times of stretching: 1,000 times Stretching rate: 200/min. / Set elongation: 30% for Sewn Product, 100% for Rubber Band

(4) Recovery of stretching / Stretching rate: 200 mm/min Gauge: 200 mm width: full width of sample / Set elongation: 30 % for Sewn product, 100% and for Rubber Band

Procedure: After stretching to 30 % or 100%, recover immediately at the same rate and leave for one minute. Then, repeat once again stretching /recovery and leaving for one minute again, and, further, repeat it for the third time. During the third time, draw the elongation-load curve for both stretching and recovery to read out the stretching force and tightening force at elongation of 10%, 20% and 30% (30%, 50%, 80% and 100%).\* The set elongation for the stretch treatment and recovery after stretching shall be 80% which is the maximum by hand operation (Figure is rounded to the whole number).

(5) Cycle test

(5-1) [water wash → autoclave treatment] is counted as one cycle, and repeat it until 10, 20, 30, 40 and 50 cycles have been completed. However, the cycles shall include the following treatments.

10 cycles: [water wash 10 times → autoclave treatment 10 times] / 20 cycles: [water wash 10 times → autoclave treatment 10 times] x2 / 30 cycles: [water wash 10 times → autoclave treatment 10 times] x3 / 40 cycles: [water wash 10 times → autoclave treatment 10 times] x4 / 50 cycles: [water wash 10 times → autoclave treatment 10 times] x5

(5-2) [water wash → autoclave treatment → stretch treatment] is counted as one cycle, and repeat it until 10, 20, 30, 40 and 50 cycles have been completed. However, the cycles shall include the following treatments.

10 cycles: [water wash 10 times → autoclave treatment 10 times → stretch treatment 1000 times]

20 cycles: [water wash 10 times → autoclave treatment 10 times → stretch treatment 1000 times] x2

30 cycles: [water wash 10 times → autoclave treatment 10 times → stretch treatment 1000 times] x3

40 cycles: [water wash 10 times → autoclave treatment 10 times → stretch treatment 1000 times] x4

50 cycles: [water wash 10 times → autoclave treatment 10 times → stretch treatment 1000 times] x5