

MOISTURE-ABSORBING/RELEASING SYNTHETIC FIBER
AND FABRIC USING THE SAME

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ABSTRACT OF THE DISCLOSURE

10 A synthetic fiber which is excellent in moisture-
absorbing/releasing property and exhibits high elongation
and high stretch recovery, characterized in that it has
moisture absorption ratios of 0.5 to 4.0% by weight in
environments of 20°Cx65% RH and that of 4.5% by weight or
more in environments of 30°Cx90% RH, respectively, and
15 also has a difference between the absorption ratios in
both the environments of 4.0% by weight or more. The
representative examples of such fibers include
polyurethane synthetic fiber and polyether synthetic
fiber. The synthetic fiber maintains a high strength at
20 break of an elastic fiber component thereof also in the
state of having absorbed moisture, is excellent in color
fastness to rubbing, and can be used for manufacturing a
stretch fiber fabric product excellent in comfort through
blending with another fiber material. The synthetic fiber
25 can be produced by incorporating a water absorption resin
having a water absorption ratio in a range from 500 to
4000% by weight into an elastic fiber such as a
polyurethane fiber or a polyurethane-urea fiber in a
finely dispersed state in an amount in a range from 1 to
30 15% by weight relative to a fiber-forming polymer.