TEIJIN

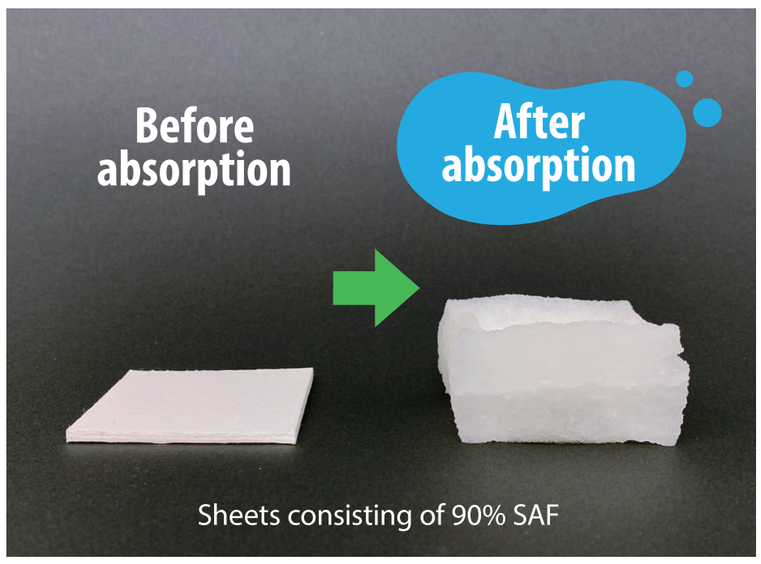
Human Chemistry, Human Solutions

Super hydroscopic & water Absorptive Fiber (SAF)

High-level functional fiber for Water and Moisture absorption,

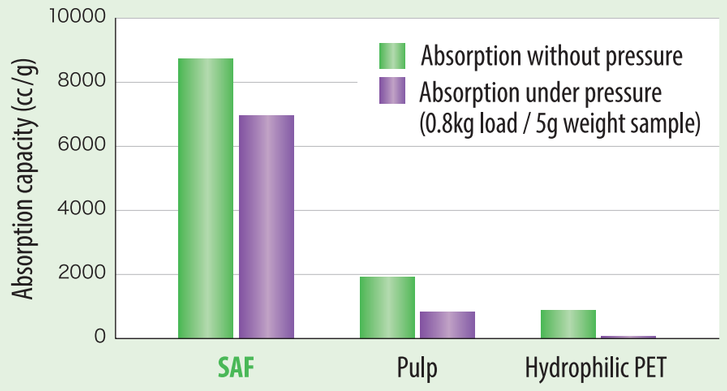
SAF is an innovative material to have absorbing functions for both water and moisture. It has an absorbing capacity of approximately 80 times of its weight in pure water, or 100% of its weight in 20°C, ≤ 90% RH condition at most.

High water-absorbent function



Comparison of water-absorption capacity of each material

(absorption without pressure vs. absorption under pressure @ 0.8kg load / 5g weight sample)



Compared to other materials, SAF shows superior water absorption / retention ability without and under pressure conditions.

Characteristics of nonwoven made of SAF

1 The weight of absorbed water level is high

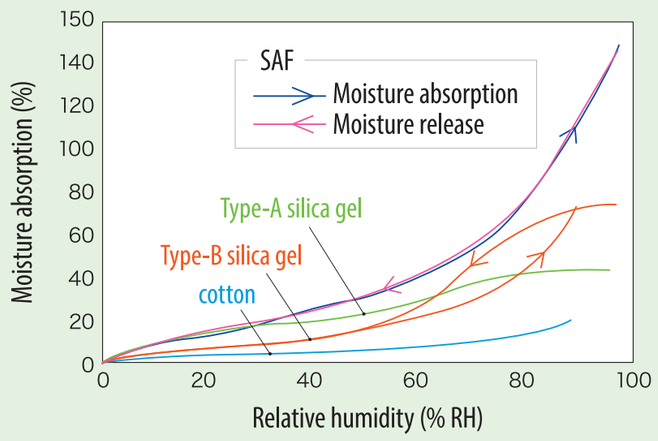
2 Water retention ability is high

(The amount of water released is low under pressurized condition)

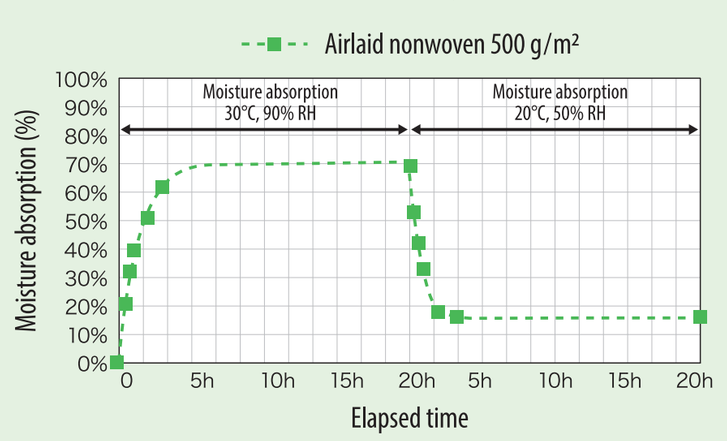
3 Water absorption level is adjustable by composition and structure.

Moisture absorption / release ability

Comparison of moisture-absorption / release ability of each material



Moisture absorption / release ability of nonwoven made of SAF



Special characteristics

1 It shows excellent absorption performance,* especially under high humidity conditions (≧ 65% RH).

*approximately 100% under 20˚C, 90% RH condition

2 SAF can control surrounding humidity because of its moisture absorption / release ability.

3 Moisture-absorption and -release speed is fast.

SAF shows high moisture-absorbing ability under high humidity.
Nonwoven made of this fiber can be repeatedly used as drying it releases the moisture once retained.

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