

清潔革命®

Quickly absorbs large amounts of ammonia gas, and its deodorizing effect can be easily restored

Eliminates ammonia odor
(acrylate)

DESMEL™

DESMEL® is a novel acrylate-based fiber that eliminates ammonia odor.

- 1 DESMEL® is a fiber that adsorbs and eliminates ammonia odor, that unpleasant, irritating smell that accompanies sweat and urine excreted from the human body. DESMEL® has more than 4 times the adsorption capacity of the type of coconut shell activated carbon generally used as a refrigerator deodorizer. DESMEL® is a novel, high-performance fiber capable of adsorbing ammonia odor very quickly.
- 2 DESMEL® is a safe, highly durable fiber in which odor sources are adsorbed onto the functional group of the acrylate fiber.
- 3 DESMEL®'s raw fiber itself has a deodorizing effect.
- 4 DESMEL®'s deodorizing effect can be easily restored by exposure to sunlight or washing with a neutral detergent.

Not harmful to the human bodies

Safe for the human body

DESMEL	Skin disorder	Oral toxicity	Mutagenicity
	(1) Semi-negative	(2) 2,000 mg/kg or more	(3) Negative

- (1) Based on a patch test carried out by the Japanese Society for Cutaneous Health
(2) Based on a test carried out by the Japan Food Research Laboratories in accordance with the OECD Guidelines for the Testing of Chemicals
(3) Based on a test carried out in accordance with Notification No. 77 issued by the Ministry of Labour

Restoration of deodorizing effect

Deodorizing effect easily restored by sunlight or washing

- DESMEL®'s deodorizing effect can be easily restored by exposure to sunlight (restoration rate: 80%).
- Its deodorizing effect can be 100% restored by machine neutral washing. Simply add a neutral detergent (e.g. about 20 cc of cooking rice vinegar) during the rinse cycle.

Adsorption power

Adsorbs large amounts of ammonia gas

Saturated adsorption of ammonia gas

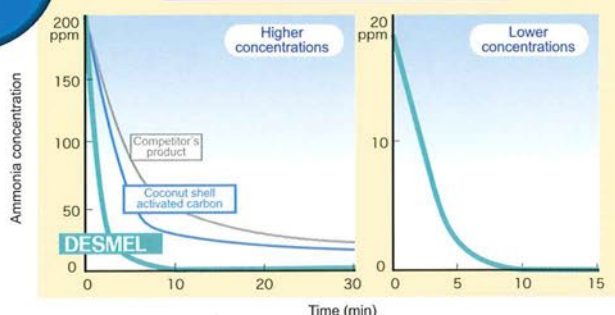
(Measured by Japan Exlan Co., Ltd.)

Amount of saturated adsorption (mL/g)	DESMEL	Activated carbon fiber	Coconut shell activated carbon
	120	30	15

Deodorizing power

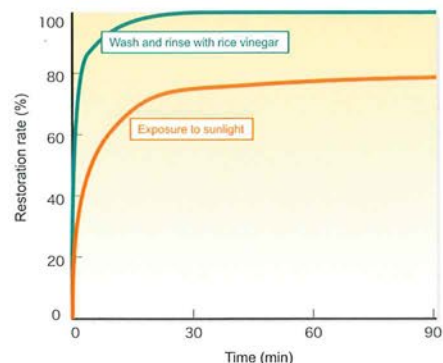
Quickly eliminates ammonia odor

Ammonia adsorption rate (at 20°C, 65% RH)



Testing method: • Sample weight: 1 g • Testing container: 1 L Tetra pak • Gas volume in the container: 1 L
• Initial gas concentrations: 200 ppm ammonia; 20 ppm ammonia
• Gas measurement method: Kitagawa gas detector system (Boken Quality Evaluation Institute)

Restoration of deodorizing effect



Recommended use

Our noses typically detect an ammonia smell when the ammonium concentration is 2-8 ppm. It is advisable that you restore DESMEL®'s deodorizing effect (by exposure to sunlight or washing) once every two weeks if you smell a faint odor (2-3 ppm) and once a week if you smell strong, irritating odor (4-8 ppm).

Note: The above data are evaluation results based on specific fabric standards and are not guaranteed values.