■ Formaldehyde measures implemented by MUJI

What is formaldehyde?

Formaldehyde is considered one of the causes of sick house syndrome, which has been in the news recently. A colorless chemical substance with an irritating odor that evaporates at normal temperature, formaldehyde is used in furniture and building materials as well as the adhesive for wallpaper. The chemical is released little by little, so if you remain in a room contaminated by formaldehyde for a prolonged period, you may suffer from irritation of the eyes and throat. High concentrations of formaldehyde may cause breathing difficulties. The Ministry of Health, Labour and Welfare (MHLW) issued guidelines in 2000 regarding indoor levels of formaldehyde.

Guidelines on Indoor Levels of Formaldehyde (MHLW, 2000)
Desirable indoor levels of formaldehyde for health:
Equivalent to 0.08 ppm or less (*1)
(at 20°C to 23°C, 100 micrograms/100 m^3 or less as the 30-minute average value)

To customers with hypersensitivity to chemical substances

The individual acceptable amount of chemical substances that account for sick house syndrome, including formaldehyde, may vary. Allergic symptoms are produced when by exposure to formaldehyde for prolonged periods leads to accumulated amounts in the human body that exceed the acceptable range. Therefore, even if the concentration level is less than 0.08 ppm, some people might experience a reaction. Currently, not all of our furniture is free of formaldehyde.

(*1) 1 ppm: Abbreviation of parts per million.
Taking a mundane example, smoking one cigarette may result in an indoor concentration exceeding 0.08 ppm.

Our current efforts

(1) We use material that contains as little formaldehyde as possible.

We proactively use wood material that releases low amounts of formaldehyde, such as plywood and MDF material, and formaldehyde-free or low-formaldehyde adhesives for bonding materials and paints.

(2) We use formaldehyde absorbing/decomposing sheets from the place of production to your house.

In a closed space, formaldehyde cannot escape and is re-absorbed by the materials. Therefore, we use a formaldehyde absorbing/decomposing sheet (*2) so that it absorbs/decomposes as much formaldehyde as possible. With this, the concentration of formaldehyde is reduced when it arrives at your house.

The included formaldehyde absorbing/decomposing sheet is used only until arriving at your house, so please dispose of it as a flammable garbage.

(3) Actual measurement based on the large chamber method from March 2003

MUJI adopts new and practical measuring method [Large Chamber Method] (*3) and strives for reduced formaldehyde in furniture in future.

The actual measured data is listed on our webpage.

(*2) Formaldehyde absorbing/decomposing sheet: Jointly developed with Aisin Seiki Co., Ltd.

(*3) Large Chamber Method: A measuring method for released formaldehyde by placing furniture in a measuring room in the actual state as a product.

Formaldehyde countermeasures in the home

(1) Room ventilation is effective.

Since formaldehyde is released into the air, daily ventilation is desirable. Especially in a newly built house, open the windows as wide as possible to ventilate adequately. The higher the room temperature and humidity, the more formaldehyde is released.

Please be careful, especially when a room is hermetically closed for a long period in summer and in the rainy season. Use a ventilating fan and habitually pay attention to ventilation. When there are more than two windows in a room, we recommend opening more than two windows to improve ventilation efficiency.

(2) Formaldehyde absorbing/decomposing sheets for storage furniture are recommended.

The sheet absorbs and decomposes chemical odors from the aldehyde series, including formaldehyde, in closed spaces, such as the drawers of chests and cupboards. Since formaldehyde is gradually released over a prolonged period, we recommend using this sheet continuously.

Formaldehyde absorbing/decomposing sheets for storage furniture

5182398 4 sheets 420 yen (tax included)/ Product price: 400 yen

- Porous natural mineral ore and pulp and paper are used as base materials, and amino acids with absorbing/decomposing ability are added.
- There is a hole at the top of nonwoven fabric, you can hang it with strings and hooks as well as placing in a drawer.
- It can be used together with camphoric mothballs.
- The period of use may vary depending on the conditions, but it is about three months.

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