Absorbs and decomposes formaldehyde that causes sick building syndrome

Two deodorant effect gets rid of formaldehyde quickly and repeatedly.

By combining two different types of performances (A and B), a very powerful deodorant effect is produced.

(A) Quick deodorizing by a chemical reaction

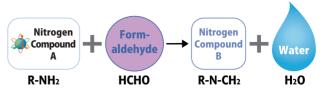
Formaldehyde combined with a special nitrogen compound is decomposed into safe, less harmful substances. This mechanism is a chemical reaction, and, with the use of reactive substances, it rapidly deodorizes formaldehyde and delivers excellent initial performance.

(B) Lasting effect by cycle deodorizing

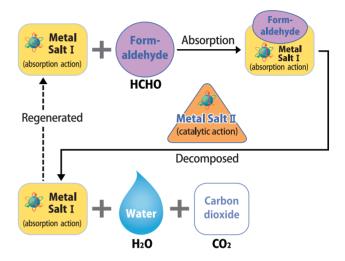
Formaldehyde combined with special Metal Salt I is decomposed by catalysis of Metal Salt II.

Since Metal Salt I is regenerated, formaldehyde is repeatedly deodorized (absorbed and decomposed). The initial deodorant effect is not great as that of A, but the effect lasts longer because of the "cycle deodorizing," in which the deodorant performance is regenerated as soon as formaldehyde is decomposed by catalysis.

[Chemical reaction mechanism]

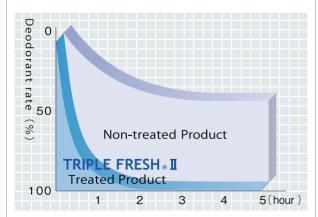


[Chemical absorption and decomposition mechanism]



100% odor eliminating for approximately 2 hours

The following graph shows the measured result that Triple Fresh® II eliminates formaldehyde. It is verified that it absorbs the odor component from the beginning and completely decomposes it after approximately 2 hours. As the size of treated product is larger, the greater deodorant efficacy is retained.

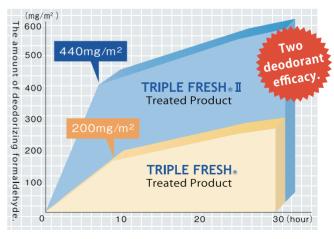


Deodorant effect against formaldehyde.

<The test method> Each 200cm² of Triple Fresh®II treated and non-treated carpet is put in the container of 500ml with the formaldehyde, and the variation per time of gas concentration in the container is measured using the detector tube.

Doubled deodorant performance against Formaldehyde

As a result of the deodorant study, it is verified that the Triple Fresh® II performs 2.2 times greater deodorant efficacy in the measurement for 6 hours compared to the former Triple Fresh® and performs doubled deodorant efficacy afterward as being shown in the graph below.



■ The comparison of deodorant performance against formaldehyde.

<The test method> Each 100cm² of Triple Fresh®II treated and Triple Fresh® treated carpet is put in the container of 2L with formaldehyde and the variation per time of gas concentration in the container is measured using the detector tube.