

How to test Deodorant products

(1) Standards for Deodorizing Products in Japan

Title **“Deodorant processed textiles certification criteria”**
 Publisher **“Japan Textile Evaluation Technology Council”** which is authorized as a Public-service corporation by Ministry of Economy, Trade and Industry.

(2) What is the organization of certification for **“Deodorizing Products”** in Japan?

It is a Public-service corporation **“Japan Textile Evaluation Technology Council”**, which is the laboratory certified by the official under Japan Industrial Standardization Law (JIS). The textile products which comply with the standards **“Deodorant processed textiles certification criteria”** are allowed to be called **“Deodorizing products”**, which can deodorize either of Sweat odors, Aged-body odors, Excrement odors, Tobacco odors, Garbage odors or Ammonia odor.

(* See the website www.sengikyo.or.jp to get more information about **“Japan Textile Evaluation Technology Council”**).

(3) What organization can I ask for the examination of our product in Japan?

Currently, five organizations are designated as examining authority by **“Japan Textile Evaluation Technology Council”**. They examine the product based on the standards **“Deodorant processed textiles certification criteria”**, and issue the test results.

(4) Odor Classification & Test Methods based on the standards **“Deodorant processed textiles certification criteria”**.

Odor Components	Odors					Applied Test Method to each gas		
	Sweat	Aged-body	Excrement	Tobacco	Garbage	Gas Detector Tube	Gas Chromatography	Sensory evaluation
Ammonia	○	○	○	○	○	○		○
Acetic acid	○	○	○	○		○		○
Isovaleric acid	○	○					○	○
Nonenal		○					○	○
Methanethiol (Methyl mercaptan)			○		○	○		○
Hydrogen sulfide			○	○	○	○		○
Indole		○					○	○
Acetaldehyde				○		○		○
Pyridine				○		○		○
Trimethylamine					○	○		○

Test Method 1 (Gas Detector Tube)

	Initial gas Concentration	Reducing Rate (in 2 hours)
Ammonia	100 ppm	70% or more
Acetic acid	50 ppm	80% or more
Methanethiol (Methyl mercaptan)	8 ppm	70% or more
Hydrogen sulfide	4 ppm	70% or more
Acetaldehyde	14 ppm	70% or more
Pyridine	12 ppm	70% or more
Trimethylamine	28 ppm	70% or more

Test Method 2 (Gas Chromatography)

	Initial gas Concentration	Reducing Rate (in 2 hours)
Isovaleric acid	38 ppm	85% or more
Nonenal	14 ppm	75% or more
Indole	33 ppm	70% or more

(5) How do the designated examining authorities examine a product and evaluate it?

According to the standards **“Deodorant processed textiles certification criteria”**, a sample is examined by an instrumental analysis and a sensory evaluation after being washed designated times (3-10 times).

[Methods]

(A) Instrumental analysis: **Detector Tube** or **Gas Chromatography**.

(B) Sensory evaluation: 6 panels.

In addition, 5 panels out of 6 must judge the gas concentration in two hours to be less than the predetermined rate in a sensory evaluation.