# Deodorizing PET Odors

Product
## FTN-103-LLST-5NW

### For 5 Fold Dilution  (Spray Use)

## Product Description

| | |
|---|---|
| **Purpose** | **Deodorization of bad living odors.** |
| | **Urine Odor, Faces Odor (Ammonia, Acetaldehyde, Butyric Acid, etc.)** |
| | **Odor from skins (Nonenal)** |
| **Storage** | **Store in cool and dark place.** |
| **Remarks** | **Do not spray against persons and animals.** |
| **Direction** | **Dilute with pure or tap waters to Fivefold or up.** |

## Technical Description

| | |
|---|---|
| **Form** | **Liquid** |
| **Color** | **Semi-transparent** |
| **NVM** | **$<10\%$** |
| **pH** | **$6.0\sim7.0$** |
| **Viscosity** | **$1.0\sim1.5$ mPa·sec** |

**Alkaline Odors**

Ammonia　　　: Urine Odor
Trimethylamine: Fish Odor

● Trimethylamine  $R\text{-}SO_3H + (CH_3)_3N \rightarrow R\text{-}SO_3(CH_3)_3N$

● Ammonia  $R\text{-}SO_3H + NH_3 \rightarrow R\text{-}SO_3NH_4$

**Acid Odors**

Acetic Acid : Sweat Odor
Valeric Acid: Socks Odor

● Acetic Acid  $R\text{-}NH_2 + CH_3COOH \rightarrow NH_3COOCH_3$

● Isovaleric Acid   $R\text{-}NH_2 + CH_3(CH_2)_3COOH \rightarrow NH_3COOCH_3\ (CH_2)_3$

**Aldehyde Odors**

Acetaldehyde: Hangover odor
　　　　　: Cigarette Odor
2-Nonenal　: Aging Odor

● Acetaldehyde  $R\text{-}NH2 + CH3CHO \rightarrow R\text{-}NCH2CH2 + H2O$

● 2-Nonenal  $R\text{-}NH2 + CH_3(CH_2)_5(CH)_2CHO \rightarrow R\text{-}NCH_3(CH_2)_5(CH)_2CH_2\ H2O$

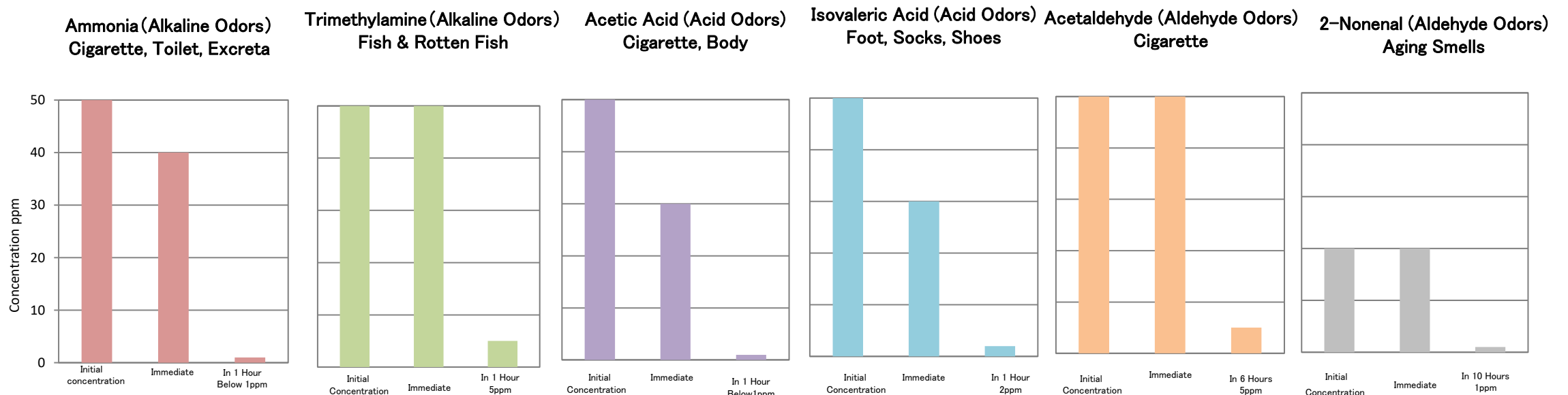## Evaluation of Deodorizing Effect  FTN-103-LLST-5NW （Diluted in Fivefold）

|  | Ammonia | Acetic Acid | 2－Nonenal | Methyl Mercaptan | Diallyl Methyl Sulfide | Dimethyl Trisulfide |
|---|---|---|---|---|---|---|
|  | Sweat Fatigue | Sweat | Aging | Mouth Breath | Garlic Mouth Breath | Stress Mouth Breath |
| Immediate | 0 | 1 | 1 | 0 | 0 | 0 |
| 30 min. | 0 | 1 | 1 | 0 | 0 | 0 |
| 1 hour | 0 | 0 | 0 | 0 | 0 | 0 |

◆Deodorizing Evaluation Table (Indicating Odor Intensity in 6 Levels)

| 0 | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Odorless | Very Weak Odor (Detectable) Detective Threshold | Weak Odor (Distinguishable) Cognitive Threshold | Easily Detectable | Strong Odor | Extremely Strong Odor |

## Evaluation of Deodorizing Effect FTN-103-LLST-5 (Diluted in Fivefold)

◆ ［Test Method］ Test methods were in conformity to Japan Textile Evaluation Technology Council and Air Freshness & Deodorizers Conference



Ammonia（Alkaline Odors）Cigarette, Toilet, Excreta  
Trimethylamine（Alkaline Odors）Fish & Rotten Fish  
Acetic Acid（Acid Odors）Cigarette, Body  
Isovaleric Acid（Acid Odors）Foot, Socks, Shoes  
Acetaldehyde（Aldehyde Odors）Cigarette  
2－Nonenal（Aldehyde Odors）Aging Smells

**Supervision: AIREX Co., Ltd.,**
**The Tokai University Academic-Industrial collaboration Testing Laboratory**

## GRAFTON INC.

〒156-0097 4-11-14-3F, Yoga, Setagaya-Ku, Tokyo, Japan  TEL03-6413-4766  FAX:03-6413-4737