

Product : **GGA-5**

Chemical Adsorbent of Aldehydes
Disinfectant of New Corona Virus

Product Description

- Application : Adsorbent for Formaldehyde, Acetaldehyde
: Disinfectant for New Corona Virus
- Formaldehyde : Chemical Adsorbing Reaction by the Dehydration of Amino & Aldehyde Groups
- Chemical Reaction : Formaldehyde $R-NH_2+HCHO \rightarrow R-NCH_2+H_2O$
- Formula : Acetaldehyde $R-NH_2+CH_3CHO \rightarrow R-NCHCH_3+H_2O$

Disinfection Effect Against New Corona Virus :

National Institute of Technology and Evaluation (NITE) confirmed, according to their verification tests among those surfactants which were known as effective to New Corona Virus, that Alkyl Glycoside (Over0.1%) was found to be effective to disinfect New Corona Virus.

The verification test by National Institute of Infectious Diseases:

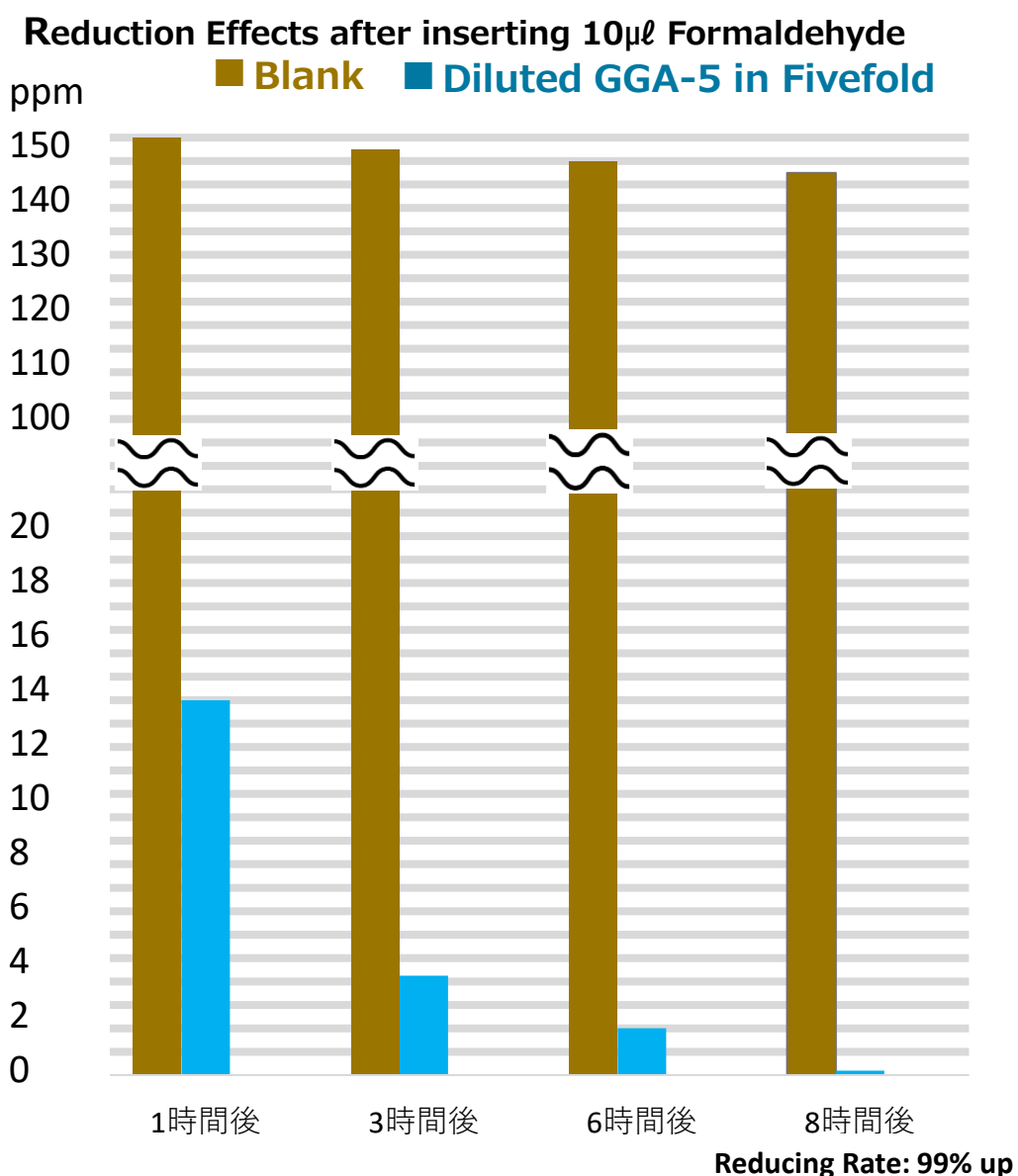
Confirmed the infectivity reduction rate of 99.999% or above in 20 sec with 0.05%.

Confirmed inactivation effect in 1 min. with 0.1%

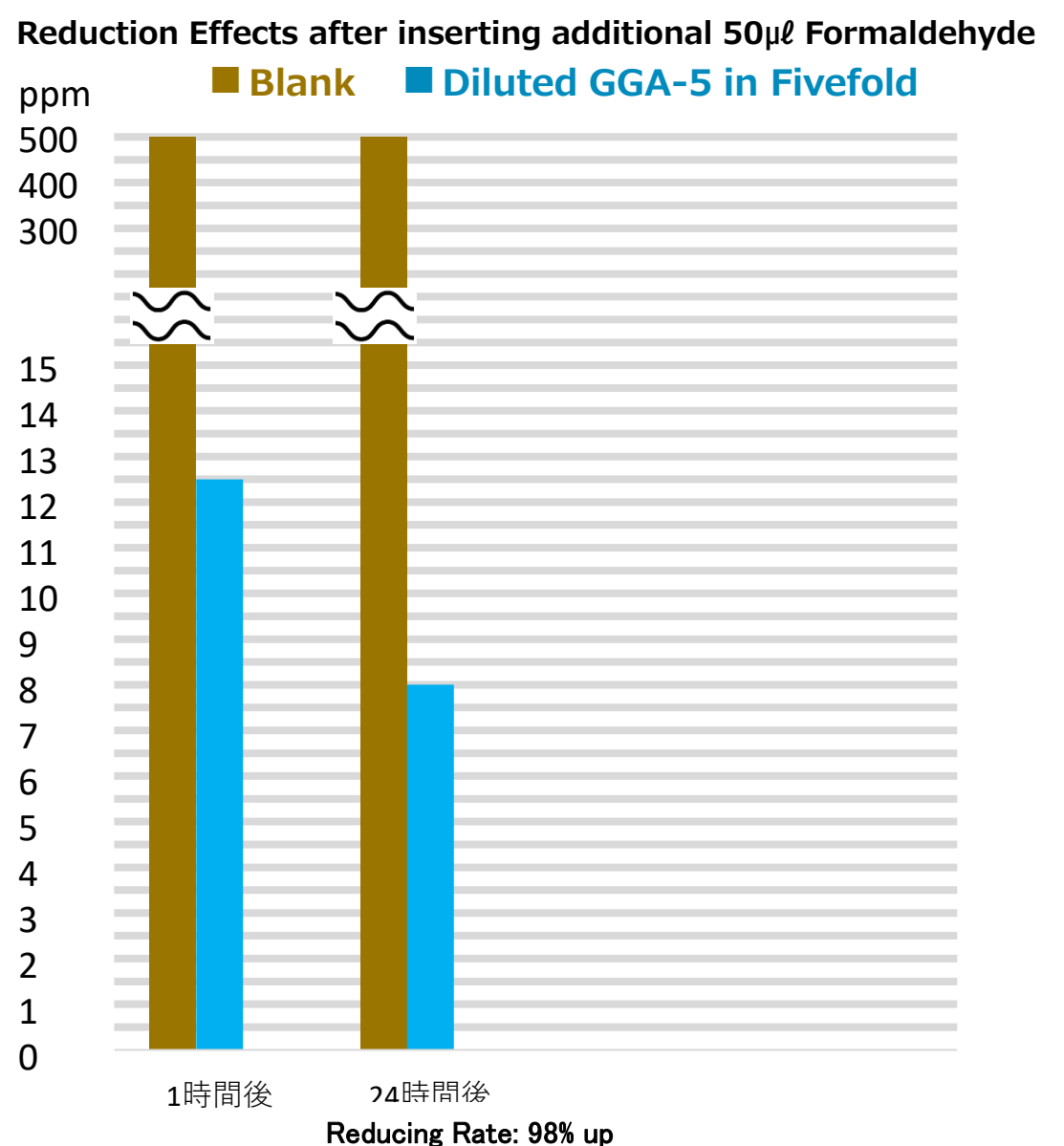
■ **GGA-5 Contains 0.5% of Alkyl Glycoside (0.1% component amount in fivefold dilution)**

- Direction : Spray (Dilute in Fivefold)
: Coating (Stock Liquid)
: Impregnate Filter

Performance : Reduction effects of Fivefold Diluted GGA-5



| Insert 1 μ l Formaldehyde | Blank | Diluted GGA-5 in Fivefold |
|-------------------------------|-------|---------------------------|
| In 1h (ppm) | 150 | 16 |
| In 3h (ppm) | 145 | 4.2 |
| In 6h (ppm) | 140 | 2 |
| In 8h (ppm) | 130 | 0.3 |



| Insert Additional 50 μ l Formaldehyde | Blank | Diluted GGA-5 in Fivefold |
|---|-------|---------------------------|
| In 1h (ppm) | 500 | 25 |
| In 24h (ppm) | 445 | 8 |

GGA-5 : Reduction Effects of Formaldehyde

10 $\mu\ell$ of 37% Formaldehyde Solution was injected as initial amount, and then, injected additional 50 $\mu\ell$ in 3 times continuously, Total 160 $\mu\ell$. As result, it was confirmed the final reduction of 99.9% or above.

Initial: Injected 10 $\mu\ell$

| | ppm | |
|-------|-------|--------------|
| | Blank | GGA-5 |
| In 1h | 150 | 7 |
| R/R | 0.0% | 99.9% |
| In 2h | 148 | 1.6 |
| R/R | 0.0% | 99.9% |
| In 3h | 142 | 0.2 |
| R/R | 0.0% | 99.9% |
| In 8h | 142 | ND |
| R/R | 0.0% | \cong 100% |

2nd : Injected 50 $\mu\ell$

| | ppm | |
|-------|-------|-------|
| | Blank | GGA-5 |
| In 1h | 520 | 20.8 |
| R/R | 0.0% | 99.9% |
| In 2h | 445 | 0.2 |
| R/R | 0.0% | 99.9% |

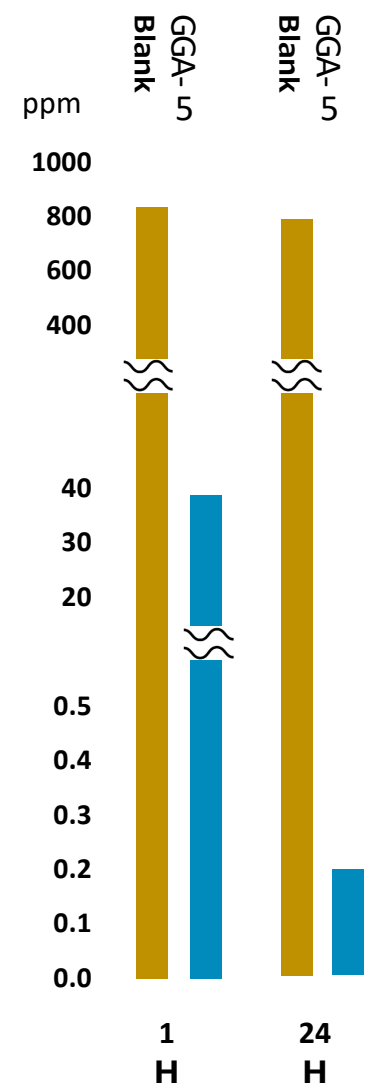
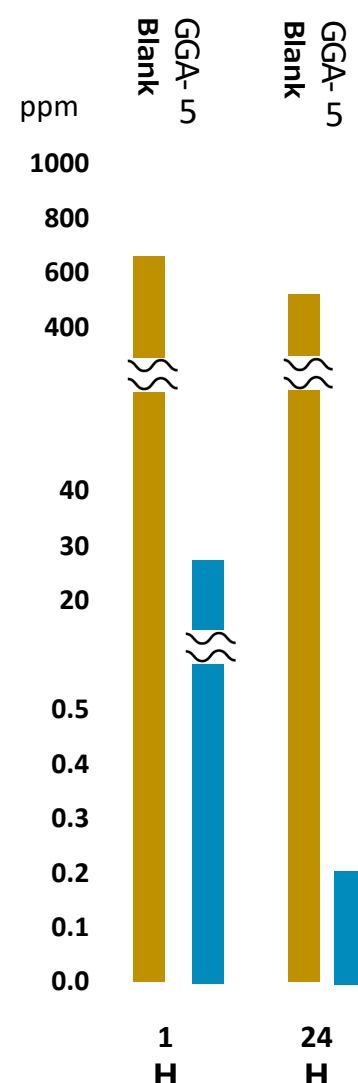
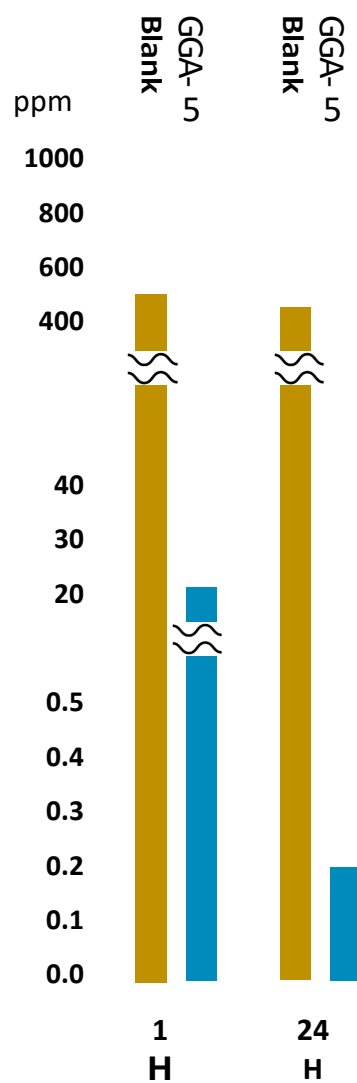
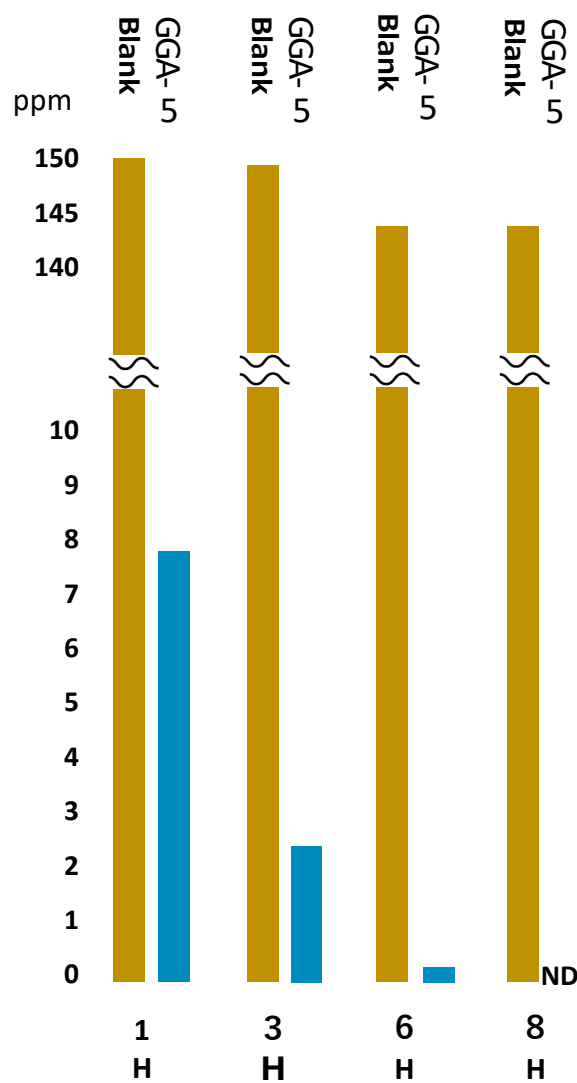
3rd : Injected 50 $\mu\ell$

| | ppm | |
|-------|-------|-------|
| | Blank | GGA-5 |
| In 1h | 650 | 27.5 |
| R/R | 0.0% | 99.9% |
| In 2h | 500 | 0.2 |
| R/R | 0.0% | 99.9% |

4th : Injected 50 $\mu\ell$

| | ppm | |
|-------|-------|-------|
| | Blank | GGA-5 |
| In 1h | 820 | 39 |
| R/R | 0.0% | 99.9% |
| In 2h | 750 | 0.2 |
| R/R | 0.0% | 99.9% |

Remarks: R/R = Reduction Rate



Technical Data

| | |
|-----------------|---|
| Form | : Liquid |
| Color | : Pale Yellow and Transparent |
| Main Components | : Amino Compound : Zinc Compound : Alkyl Glycoside (0.5%) : Purified Water |
| pH | : 2.5~3.0 |
| Viscosity | : 2~5mPa·sec |

Precaution

Wear protective glasses and masks to prevent the spraying mists get into eyes.

Above data are obtained by our laboratory and are considered as accurate, however, recommend for review and check the final usage and conditions prior to using for actual purposes.

GRAFTON INC.

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