



## Environmentally Friendly Products and Technologies that Contribute to a Sustainable Future

### ◆ Natural food dyes

"Natural food dyes" are products made from naturally occurring materials, with consideration for human safety and the environment.

Food colorants add color to foods, enriching our dietary lives. Additionally, some products have obtained "Halal certification," meeting the expectations of customers in Islamic regions.

Furthermore, we are advancing the expansion into industrial applications, not limited to food uses.



### ◆ Metal-free aluminum coloring dyes

Demand is growing for dyes to color aluminum, a lightweight, strong, and easily recycled metal. Leveraging its long history of organic composite technology, Hodogaya Chemical manufactures and sells metal-free aluminum coloring dyes. These meet the need for environment- and people-friendly aluminum coloring dyes that use no heavy metals, excel in light resistance and color affinity, and enable varied color expressions.



### ◆ Bio-PTG (Polymer materials)

PTG, one type of polyol that is a polyurethane raw material, is an indispensable raw material for spandex and other products. With a proven track record of over 10 years, Hodogaya Chemical was the first company in Japan to develop and sell Bio-PTG, which possesses the same quality as traditional PTG but is environmentally friendly because the main raw materials were switched from petroleum-derived ones to plant-derived ones. In addition, we are developing a special grade of plant-derived products.



### ◆ Peracetic acid formulation

The peracetic acid formulation OXYATTACK (disinfectant agent for food products), a hydrogen peroxide derivative, was introduced into the market in 2017. While having powerful anti-bacterial effects on vegetables, fruit and meat, it is broken down into acetic acid and water after use, and does not generate chlorine either, making it an environmentally friendly product that has won the approval of customers.



### ◆ ODI (Phosgene derivative)

Octadecyl isocyanate (ODI), a raw material for release agents, paints, and coating materials, is made from vegetable oil and fat, and meets the needs of customers from all over the world.

Because it is derived from vegetables, it helps control the occurrence of environmental CO<sub>2</sub>, which is said to be a cause of climate change.

In addition, in April 2024, we obtained RSPO certification\*.

\*RSPO: Roundtable on Sustainable Palm Oil



### ◆ Oxygen supply materials (Agricultural materials)

In recent years, extreme weather conditions, including torrential rains and typhoons have become more frequent with each passing year. In addition to the direct damage that these events cause to farmland, crop yield is also affected due to moisture damage. As an application of hydrogen peroxide derivatives in the agricultural field, we provide customers with oxygen supply materials that promote healthy growth by supplying oxygen to soil harmed by bad weather and other factors, thereby improving the growing environment for crops as a countermeasure against moisture damage. These are also environmentally friendly products that do not contaminate farm land.

