Responding to the COVID-19 Pandemic: Social Contribution through Diverse Products and Technologies

Relevant SDG

SDG 3: Ensure healthy lives and promote well-being for all at all ages

Seeing the strain that the COVID-19 (novel coronavirus) pandemic has put on the medical system, we at Mitsubishi Chemical (MCC) asked ourselves how we could contribute using the industrial materials and technologies of the MCC Group. Leveraging ideas and networks from within the Group, and the diversity and versatility of its chemicals, we have provided the following products to society.

Contributing through Products

Plastic Gowns

We developed plastic gowns based on instructions from the Ministry of Health, Labour and Welfare by adapting polyethylene rain ponchos. We added thumb holes at the ends of the sleeves to prevent them from riding up as well as a perforated line down the back to make it easy to take the gowns off, reducing the risk of contact-based infection. Furthermore, each gown weighs less than 100 grams, helping to reduce waste when used gowns are thrown away.

Plastic gown

Face Shields

MCC created face shields by applying polyester sheet manufacturing technologies used to produce food packaging trays along with curved creasing technologies developed for cosmetics case processing.

MCC was quick to donate and supply plastic gowns and face shields to medical institutions, helping to prevent the spread of infection in hospitals and clinics.

Standard face shield

Glare reduction face shield

Hi-Selon™ Laundry Bags

Laundry bags made from our water-soluble film Hi-Selon™ allow users to wash used sheets or clothing without touching them. Their use, mainly in hospitals, helps prevent infection.

Hi-Selon™ laundry bag

SHINKOLITE™ Cast Acrylic Sheet Partitions

MCC offers SHINKOLITE™ continuous cast acrylic sheets that are used to make partitions that help prevent the airborne spread of COVID-19 in daily life. Due to their excellent transparency, these products are being used in a wide array of settings, such as at the registers and counters of stores and restaurants; in offices; service counters at public service facilities; and on TV filming sets.

Standing partition made of SHINKOLITE™ cast acrylic sheet

HISHITANK™ Water Tanks

HISHITANK™ is a water tank made of fiber-reinforced plastic developed primarily to provide clean drinking water and featuring outstanding performance in terms of seismic resistance, hygiene, durability and workability. These tanks have been installed by the Nippon Foundation at facilities built to combat the COVID-19 pandemic. They have also been installed at quarantine lodging facilities built by the Hong Kong government specifically for COVID-19 patients and the Osaka Corona Severe Center to help ensure an adequate supply of hospital beds.

HISHITANK™ water tanks

Wasaouro™ Antibacterial, Anti-Mold Film

Wasaouro™ is an antibacterial, freshness-maintaining agent, the principal component of which is allyl mustard oil (allyl isothiocyanate, “AIT”), the main compound responsible for the spicy flavor of wasabi and Chinese mustard. AIT-impregnated transparent films gradually release AIT, providing an easy and safe way of maintaining food freshness and quality by suppressing the growth of bacteria and mold. This product is well suited to maintaining the quality of products with short shelf lives, such as boxed lunches, and opportunities for its use have grown as demand for takeout has grown during the COVID-19 pandemic.

Wasaouro™ antibacterial, anti-mold film

Anti-Virus Spray and Anti-Virus Wet Wipes

The MCC Group offers the anti-viral, anti-bacterial[1] products Anti-Virus Spray and Anti-Virus Wet Towel (wet wipes). The spray is made for use on home fixtures and furniture, such as doorknobs, tables and sofas, as well as clothing, curtains and other textiles, while the wet wipes are ideal for use on doorknobs and other objects on while on the go. The long-lasting anti-viral, anti-bacterial ingredient (quaternary ammonium salts) these products contain fends off viruses and bacteria and remains effective even after drying for approximately 20 days,[2] longer than previous products.

1 Not effective on all viruses and bacteria.
2 Effects and their duration may vary depending on usage conditions.

Anti-Virus Spray

Anti-Virus Wet Towel

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Main Products Helping Combat the Spread of COVID-19 and Related Group Companies

Plastic gowns	J-Film Corporation
Face shields	J-Film Corporation
Laundry bags	MCC Trading Co., Ltd.
Partitions made from SHINKOLITE™ cast acrylic sheet	Mitsubishi Chemical Methacrylates Ltd.
HISHITANK™	Mitsubishi Chemical Infratec Co., Ltd.
Wasaouro™	Mitsubishi Chemical Corporation
Anti-Virus Spray	Shinryo Corporation
Anti-Virus Wet Wipes	Shinryo Corporation

Other Forms of Contribution

IP Open Access Declaration Against COVID-19

MCC joined the IP Open Access Declaration Against COVID-19 in May 2020. The declaration is a pledge to not assert any patent right, utility model right, design right or copyright against any development, manufacture, sale or other related activity carried out for the purpose of stopping the spread of COVID-19. MCC declared that, with regard to activities carried out for the sole purpose of stopping the spread of COVID-19, it would temporarily suspend its assertion of patent rights, utility model rights, design rights and copyrights and refrain from seeking compensation for their use.

For Children

With school closures and efforts to stay home to prevent the spread of infection, many children are spending more time than usual at home. To make this time more enjoyable and help spark an interest in chemistry, since May 2020, MCC has been soliciting chemistry experiment videos from its employees and posting them to the MCC Group internal portal site. Employees submitted more than 10 videos that encourage children to think, experiment and learn in a fun way using household materials and provide explanations of chemical phenomena. Beginning in July 2020, we published some of these on YouTube.

Experiment video

Providing a Vaccination Site Venue and Supplies

MCC's Toyama Plant allowed Toyama City to use the KAITEKI CHEMICAL Gymnasium as a group vaccination site free of charge to help increase the COVID-19 vaccination rate. In addition, we donated 17,000 high-efficiency N95 face masks that MCC's Shiga Plant had stockpiled to medical facilities in Nagahama City.

Going forward, while working in coordination with government and industry organizations, the MCC Group will continue to solicit ideas covering a wide range of topics from employees, seeking to combine its diverse products and technologies to proactively develop new products that will help combat the spread of COVID-19.