The Kuraray Group’s Business Model

Our Unique Technical Strengths Create Products with the World’s Top Market Share*

We at Kuraray have used our unique technical strengths to create products that the world had never seen before. We were the first company in the world to commercialize KURALON™ (PVA fiber), the first synthetic fiber produced using made-in-Japan technology. Other businesses we have created include poval resin (PVA resin), which is a raw material of KURALON™; PVA film, which is essential for liquid crystal displays (LCDs); EVAL™ (ethylene vinyl-alcohol copolymer [EVOH] resin) which features excellent gas barrier properties; and a lineup of various commercialized chemical products that use the world’s first industrialized synthetic isoprene monomers as materials. We have also launched a wide range of products that have become an integrated part of people’s lives, such as CLARINO™ (man-made leather), which recreates the structure of natural leather, and MAGIC TAPE™ (hook-and-loop fastener). Sales of products with the highest global market share* that we have created using our unique technologies accounted for more than half of the Kuraray Group’s total sales in fiscal 2019.
Kuraray Group Products with Top Market Share Worldwide*

**PVA resin (Excluding China)**
PVA resin was industrialized as a raw material for the synthetic fiber KURALON™. It has a number of characteristics: It is water soluble, emulsifiable, resistant to oil and chemicals, and easy to form into film. It is used in a wide range of applications such as paper processing agents, adhesives, and as a stabilizer for the polymerization of vinyl chloride resin.

**Optical-use PVA film**
Optical-use PVA film is used as a polarizing film, which is vital to LCD displays such as flat-panel TVs, PC monitors, tablets, and smartphones.

**Water-soluble PVA film**
Water-soluble PVA film is used for unit dose applications in detergents, personal care, agrichemicals, food ingredients and water treatment. Because the film dissolves completely in water and is environmentally friendly, it does not contaminate the recycling stream or contribute to micro-plastic pollution.

**EVAL™ (EVOH resin)**
EVAL™ provides excellent barrier properties against the permeation of gases, superior to those of any other plastics. It is used widely in food packaging materials to block out oxygen and preserve the flavor and quality of foods. It is also adopted in automotive plastic fuel tanks, as it provides a highly effective barrier against fuel vapor permeation. It is being used increasingly in a wide variety of applications, such as vacuum insulation panels for large refrigerators, in order to improve energy efficiency.

**Isoprene chemicals**
We apply our unique synthesizing technologies to produce a cleaner MMB that is highly safe and easy to handle, as well as diols, aroma chemical and cosmetic ingredients, pharmaceutical and agrichemical intermediates, and more.

**GENESTAR™ (Highly heat-resistant polyamide resin)**
GENESTAR™ is a new highly heat-resistant polyamide resin created with our proprietary technologies. It is used in electronic parts of mobile phones, personal computers, and the like, and it is applied in backlights for LED liquid-crystal TV panels and in the automotive field as well.

**Activated carbon**
Activated carbon is created through a reaction with gas and chemical agents at high temperatures using a carbon substrate, such as bituminous coal and coconut shells, and has micropores (diameter: 10 – 200 Å, 10 Å = 1 nm). The micropores form a meshwork structure inside the activated carbon, and the walls of these micropores give the material a large surface area (500 – 2,500 m²/g) for adsorbing a wide range of substances by the capillarity of the micropores.

**VECTRAN™ (High-strength polyarylate fiber)**
VECTRAN™ fiber has about seven times the tensile strength of steel by weight and provides excellent abrasion, flex fatigue, and chemical resistance, among other physical properties. It is used in a range of applications including aerospace uses, composites, electronic components, ropes, and sporting goods.

* In-house survey