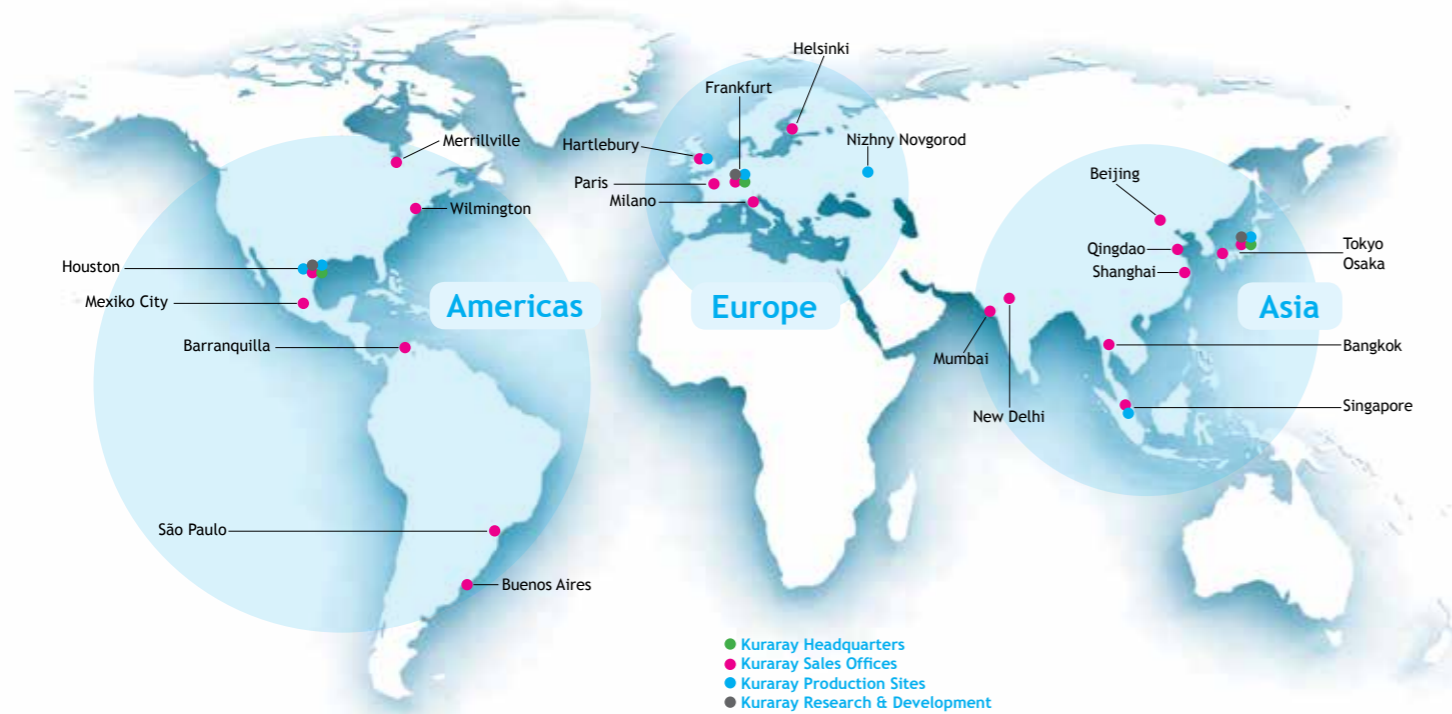


Adding value to your products - worldwide



KURARAY POVAL™, EXCEVAL™, ELVANOL™ and MOWIFLEX™ are the trademarks for polyvinyl alcohols made by Kuraray. Their key characteristics – outstanding film-forming properties and high binding strength – add real value to your products. Our polymers are water-soluble, highly reactive, crosslinkable and foamable. They have high pigment binding capacity, protective colloid characteristics and thickening effects. The physical and chemical properties of KURARAY POVAL™ make it ideal for a wide variety of applications, ranging from adhesives through paper and ceramics to packaging films. Many of our polymers are food contact-

approved and thus suitable for food applications. Ecologically KURARAY POVAL™ is advantageous due to its biodegradability and the fact that combustion does not generate residues. It is available in various particle sizes from granules to fine powders.

Kuraray produces its wide range of KURARAY POVAL™ grades in Japan, Singapore, Germany and the USA. Kuraray's global production and service network make us your partner of choice for innovative high-quality PVOH resins.

**KURARAY - Here to Innovate.**

**Kuraray America, Inc.**  
2625 Bay Area Blvd.,  
Suite 600 Houston, TX77058  
United States of America  
Phone: +1 800 423 9762  
info.kuraray-poval@kuraray.com

**Kuraray Europe GmbH**  
Philipp-Reis-Str. 4  
65795 Hattersheim am Main,  
Germany  
Phone: +49 69 305 85 351  
info.eu-poval@kuraray.com

**Kuraray Asia Pacific Pte., Ltd.**  
250 North Bridge Road  
#10-01/02 Raffles City Tower  
Singapore 179101  
Phone: +65 6337 4123  
infopoal.sg@kuraray.com

**Kuraray China Co., Ltd.**  
Unit 2207, 2 Grand Gateway  
3 Hongqiao Road, Xuhui Dis-  
trict, Shanghai 200030, China  
Phone: +86 21 6119 8111  
infopoal.cn@kuraray.com

## Head Office:

**Kuraray Co., Ltd.**  
Ote Center Bldg.  
1-1-13, Otemachi Chiyoda-ku  
Tokyo 100-8115, Japan  
Phone: +81 3 67 01 1000  
infopoal.jp@kuraray.com



## MOWIFLEX™

Combining strengths of  
thermoplastics and PVOH

## Optimized PVOH solutions for thermoplastic processing

Kuraray has a long history in the development of polyvinyl alcohol based products used in various industries. MOWIFLEX™, a compound of PVOH and plasticizer, has been designed in order to suit thermoplastic processing needs.

MOWIFLEX™ possesses all the properties of standard PVOH and can be processed as a thermoplastic at the same time creating the possibility to be used in various application fields. It can also be combined with other polymers to modify the properties of the end product.

Gas barrier   
 Non toxic   
 colourable   
 Weldability & bonding  
 Water vapour permeability   
**mowiflex™**   
 tensile strength  
 Low electrostatic surface charge   
 Forms clear and glossy films

The new nomenclature of Kuraray's diverse MOWIFLEX™ product portfolio includes a reference to the mentioned properties as well as important characteristics like solubility and melt viscosity.

## mowiflex™ C 12 XXX

### Solubility

C = cold, 25 °C  
 M = medium, 50 °C  
 H = hot, 70 °C or higher

### Melt Viscosity

12 g/10 min  
 Measuring conditions:  
 C : 190 °C, 21,6 kg load  
 M : 210 °C, 2,16 kg load  
 H : 230 °C, 2,16 kg load

### Additives/colors

T = Talc  
 Ti = Titan dioxid  
 B = blue  
 R = red  
 MS = melt spinning etc.

## Thermoplastic processing

According to its chemical and mechanical properties and especially to its thermoplastic characteristic, MOWIFLEX™ can be processed in various ways without pretreatment.

- Injection moulding
- Blow Moulding
- Rapid prototyping

## Applications

These methods of thermoplastic processing of MOWIFLEX™ result in a very broad range of applications and the use in numerous end products. Suitable MOWIFLEX™ grades for the respective applications can be seen below.

- Water soluble shapes and packaging  
mowiflex C 600 | M 05 | H 15
- 3D printing/rapid prototyping  
mowiflex C 17
- Smokable casings  
mowiflex C 30
- Multilayer films  
mowiflex C 17

## Disposal

Additionally to its non-toxic character, MOWIFLEX™ is also environmentally friendly and can be easily disposed as it undergoes biodegradation in conventional waste water treatment.

Please contact [Mowiflex@kuraray.eu](mailto:Mowiflex@kuraray.eu) for additional information about further MOWIFLEX™ products.

