

# *kuraray* **poval**<sup>™</sup>

Here to Innovate

## **KURARAY POVAL<sup>™</sup> AND EXCEVAL<sup>™</sup> POLYVINYL ALCOHOL SPECIALTIES FOR PAPER COATING MATERIAL**

KURARAY POVAL and EXCEVAL are soluble polymer powders that dissolve in water to form viscous transparent solutions. These may be used in a broad spectrum of applications in the paper, textile, construction and adhesives industries as well as in the cosmetics and packaging sectors.

### **Paper Industry Applications**

Due to their versatility and wide range of grades available, KURARAY POVAL and EXCEVAL facilitate the functionality of specialized papers.

- Coated Papers
- Banknote Paper
- Food Wrapping Paper
- Thermal Paper
- Tissue Paper
- Paper Board Liner
- Silicone Release Liner
- Inkjet Paper
- Pressure Sensitive Paper

←----->  
**Degree of hydrolysis**

← **LOW** WATER RESISTANCE **HIGH** →

← **LOW** GAS BARRIER **HIGH** →

← **HIGH** SURFACE TENSION **LOW** →

← **HIGH** SOLUBILITY **LOW** →

←----->  
**Molecular weight**  
(Degree of polymerization)

← **LOW** FILM STRENGTH **HIGH** →

← **LOW** VISCOSITY **HIGH** →

### **Basic Properties of KURARAY POVAL<sup>™</sup> and EXCEVAL<sup>™</sup> for Paper Applications**

Kuraray has the widest range of PVOH grades available. Conventional KURARAY POVAL grades are mainly characterized by their solution viscosity (a function of the degree of polymerization and molecular weight) and degree of hydrolysis.

EXCEVAL is ethylene modified PVOH, which enhances water resistance and film forming performance beyond that of conventional PVOH resins for coated papers.

Additionally, Kuraray offers various other functionally modified PVOH grades that meet the needs of each unique paper application.

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## BRIGHT IDEAS FOR PAPER APPLICATIONS

Our products play an important role in paper applications such as optical brightening agents and paper coatings where they, simultaneously serve as thickening and water retention aids for better productivity.

### Barrier Films

Owing to the insolubility of polyvinyl alcohol in non-aqueous solvents, KURARAY POVAL and EXCEVAL grades are ideal for forming barrier coatings, e. g. barriers against silicone oil, grease, oil, oxygen or against migration of mineral oil.

In other applications, KURARAY POVAL is utilized as a strong binder for matte, glossy, and high speed industrial inkjet papers. KURARAY POVAL and EXCEVAL are also used as thermal dye dispersants and thermal top-coat agents in combination with cross-linking agents for thermal paper and label applications.

### Locations

#### **KURARAY POVAL: Americas**

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Houston, TX 77058  
1.800.423.9762

#### **KURARAY POVAL: Japan**

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#### **KURARAY POVAL: Europe:**

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