

Please contact  
Mowiflex@kuraray.eu  
for additional infor-  
mation about further  
MOWIFLEX™ products.

## MOWIFLEX™ – a crucial component for food casings

MOWIFLEX™ is a special compound of PVOH and plasticizer designed for thermoplastic processing. Due to its unique properties it is ideally suited for the use in foodstuff casings that comprise a blend of a polyamide base, MOWIFLEX™ and other optional agents. The shrinkable and smokable thermoplastic film overcomes the drawbacks of previous food casing products. Casing containing

MOWIFLEX™ show significantly better performance especially in terms of **dimensional stability, uniformity of diameter, permeability to smoke, surface printability and meat adhesion.** Moreover, **MOWIFLEX™ may comprise further additives** such as slip agents, antioxidants, pigments, dyes, fillers and polymeric compounds and even mixtures thereof.

## How MOWIFLEX™ improves required properties

Particularly in the case of foodstuffs, a high product quality and a long shelf life have absolute priority. MOWIFLEX™ is perfectly suitable for sausages, meat and cheese casings or other smokable goods. The film exhibits a level of porosity that enables **smoke components and water vapour to pass through the film**, thereby flavouring and/or colouring the encased foodstuff. This synthetic food casing provides a high degree of **oxygen barrier properties and protects the product from external influenc-**

**es**, such as UV-radiation and drying-out. Furthermore, MOWIFLEX™ adds and supports additional properties that are of critical importance for food casings. These include **high mechanical strength and elasticity, excellent thermal shrinkage, caliber stability during stuffing, high thermal resistance and aroma barrier.**

## Production efficiency of casings thanks to MOWIFLEX™

The synthetic casings on a polymeric base including MOWIFLEX™ have several advantages in comparison to natural casings or those made of cellulose or collagen. Firstly, these casings can be produced of a polymer melt in a **large-scale industrial mass production.** The second aspect is **cost efficiency** as natural casings are an expensive and rare good and also affected by bacterial degradation. Thirdly, the manufacturing of synthetic cellulose or collagen casings is also less yielding and associated with toxic substances like carbon disulphide and formaldehyde.

Considering this, there are two efficient methods of casing production:

1. extrusion as tube through an annular die or
2. extrusion through a flat-slit die to obtain a flat sheet. The film, when extruded and formed into a casing, remains dimensionally stable once stuffed with foodstuff and throughout the cooking and smoking processing cycle. It results in a tight wrinkle-free appearance without requiring any after-shrinking steps.



## 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