

# TECHNICAL DATA SHEET

# **KYNAR® MG15 POWDER**

## FLUORINATED HOMOPOLYMER POWDER

KYNAR® resins are fluorinated thermoplastic homopolymers.

KYNAR® MG15 resin is a crystalline high viscosity polymer of polyvinylidene difluoride. It is an engineering polymer with an outstanding balance of physical strength and high chemical resistance which make it ideal for micro and ultra-filtration membranes for durable water purification and other applications.

KYNAR® MG15 resin is soluble in selected solvents and can be used in solution processing applications. It is especially recommended for hollow fiber and flat sheet membranes.

KYNAR® MG15 resin has NSF, FDA, and USP Class VI certifications for use in potable water, food processing, and bio-pharma applications.

#### **DESIGNATION**

## **MAIN APPLICATIONS**

• Water Membrane

### **DELIVERY FORM**

Powder

## **RHEOLOGICAL PROPERTIES**

PROPERTIES	VALUE	TEST STANDARD
Melt viscosity, 230°C (445°F) at 100 s-1	33 - 39 kPo	ASTM D3835

#### **MECHANICAL PROPERTIES**

PROPERTIES	VALUE	TEST STANDARD
Tensile modulus, 23°C (73°F)	1845 MPa	ASTM D638
Yield stress, 23°C (73°F)	44.8 - 55.2 MPa	ASTM D638
Flexural modulus, 23°C (73°F)	1380 - 2310 MPa	ASTM D790

## THERMAL PROPERTIES

PROPERTIES	VALUE	TEST STANDARD
Glass transition temperature, 10°C/min	-40 °C	ISO 11357-1/-2
Melting temperature, 10°C/min	168 °C	ISO 11357-1/-3

## **OTHER PROPERTIES**

PROPERTIES	VALUE	TEST STANDARD
Specific gravity, 23°C (73°F)	1.77 - 1.79 g/cm³	
Solution viscosity, 20°C (68°F)	1500 cPo	Internal Arkema
Water absorption, Saturated in water at 23°C (73°F)	0.04 %	ASTM D570

## **SPECIAL CHARACTERISTICS**

• Flame & smoke

**Headquarter: Arkema France** 420, rue d'Estienne d'Orves 92705 Colombes Cedex - France T +33 (0)1 49 00 80 80

