

NORYL™ PPE POWDERS + CONCENTRATES 6470C

DESCRIPTION

Noryl 6470C is a compounded polyphenylene ether resin concentrate containing polystyrene; this grade is intended for use as an additive or a building block in a variety of thermoplastics such as XPS foams where it enables meeting challenging requirements on thermal, flame & mechanical performance. Noryl 6470C resin can be used for packaging applications and to improve properties like Heat Distortion, and Creep Resistance for polyolefins such as PP, PE and thermoplastic elastomers like Styrenic Block Copolymers.

GENERAL INFORMATION	
Features	Hydrolytic Stability, Low Creep Sensitivity, Foamable, Good Stiffness, Good dimensional stability, High Heat Resistance, High Strength, Amorphous, Low Shrinkage, Thermally conductive/Electrically isolative, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding, Extrusion, Thermoforming

TYPICAL PROPERTY VALUES

Revision 20260518

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield, 50 mm/min	87	MPa	ISO 527
Tensile Stress, break, 50 mm/min	74	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	6	%	ISO 527
Tensile Modulus, 1 mm/min	2900	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	122	MPa	ISO 178
Flexural Modulus, 2 mm/min	2900	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched 80*10*4 +23°C	3	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	3	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	2	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	2	kJ/m ²	ISO 179/1eA
THERMAL ⁽¹⁾			
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	166	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	143	°C	ISO 75/Af
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	158	°C	ISO 75/Bf
PHYSICAL ⁽¹⁾			
Density	1.07	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.25	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62
Melt Volume Rate, MVR at 280°C/10.0 kg	16	cm ³ /10 min	ISO 1133
Matrix Tg	166	°C	DMA
INJECTION MOLDING ⁽²⁾			
Drying Temperature	80 – 100	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Time	2 – 4	Hrs	
Melt Temperature	310 – 320	°C	
Nozzle Temperature	300 – 320	°C	
Front - Zone 3 Temperature	310 – 320	°C	
Middle - Zone 2 Temperature	300 – 320	°C	
Rear - Zone 1 Temperature	280 – 300	°C	
Hopper Temperature	40 – 60	°C	
Mold Temperature	80 – 110	°C	
EXTRUSION ⁽³⁾			
Drying Temperature	90 – 100	°C	
Drying Time	2 – 3	Hrs	
FIRST EXTRUDER ⁽⁴⁾			
Hopper Temperature	40 – 50	°C	
Barrel Temperature	140 – 290	°C	
Melt Temperature	200 – 250	°C	
SECOND EXTRUDER ⁽⁵⁾			
Barrel Temperature	80 – 200	°C	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.
- (3) Foam extrusion parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations. Tandem extruder is recommended for Foam extrusion. First extruder is for creating Homogeneous Melt, Dissolution of gas/Blowing agents, Plasticization. For Second extruder Decrease temp and build pressure to the die
- (4) Twin screw extruder
- (5) Single screw extruder

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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