NORYL™ PPE POWDERS + CONCENTRATES 646

REGION AMERICAS

DESCRIPTION

NORYL PPE 646 resin is a high molecular weight polymer based on Polyphenylene Ether (PPE). This material is intended for use as an additive or a building block in a variety of thermoplastics and thermoplastic elastomers such as Styrenic Block Copolymers. PPE powder can be used to improve properties (i.e. Heat Distortion and Creep Resistance). It is hydrolytically stable and non-hydroscopic (typically less than 0.2% water uptake). The polymer is soluble in common organic solvents like toluene, chloroform, and THF. Chemical name: Poly (2,6-dimethyl-, 1,4-phenylene ether) (PPE) Formula: (C8H8O)n Regulatory Status: Complies with the FDA regulation 21CFR 177.2460. Also complies with EU Directive 2002/72/EC.

GENERAL INFORMATION	
Features	Flame Retardant, Hydrolytic Stability, Amorphous, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Creep resistant, Dimensional stability, High stiffness/Strength, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyphenylene ether (PPE)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Mobile Phone - Computer - Tablets, Circuit Boards/Additives
Industrial	Industrial General
Packaging	Industrial Packaging

TYPICAL PROPERTY VALUES

Revision 20260714

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
THERMAL (1)			
Tg (half width)	217	°C	SABIC method
PHYSICAL (1)			
Mean Resin Particle Size	200	micrometer	SABIC method
Physical Form	POWDER	-	SABIC method
Bulk Density	450	kg/m³	ISO 1183
Intrinsic Viscosity	0.46	dl/g	SABIC method
Phenolic End-group Content	1130	ppm	SABIC method
Mw	53500	-	SABIC method
Mn	20200	-	SABIC method
D	2.7	-	SABIC method
Toluene Content	<1500	ppm	SABIC method

(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.

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