

## Idemitsu Kosan Xarec® WA 212 SPS, 30% Glass Filled

Category : Polymer , Thermoplastic , Polystyrene (PS) , Syndiotactic Polystyrene (SPS) , Syndiotactic Polystyrene (SPS) with Glass or Carbon Fiber

### Material Notes:

Crystalline Polymer, Glass Filled, Impact Modified. Used in Automotive and Industrial applications.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_idemitsu-Kosan-Xarec-WA-212-SPS-30-Glass-Filled.php](http://www.lookpolymers.com/polymer_idemitsu-Kosan-Xarec-WA-212-SPS-30-Glass-Filled.php)

Physical Properties	Metric	English	Comments
Density	1.25 g/cc	0.0452 lb/in <sup>3</sup>	
Filler Content	30 %	30 %	
Water Absorption	0.010 %	0.010 %	24 hrs., 50% RH
Linear Mold Shrinkage, Flow	0.0010 - 0.0030 cm/cm	0.0010 - 0.0030 in/in	
Linear Mold Shrinkage, Transverse	0.0030 - 0.0050 cm/cm	0.0030 - 0.0050 in/in	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	125 MPa	18100 psi	
Elongation at Break	2.2 %	2.2 %	
Tensile Modulus	9.40 GPa	1360 ksi	
Flexural Yield Strength	190 MPa	27600 psi	
Flexural Modulus	9.20 GPa	1330 ksi	
Izod Impact, Notched (ISO)	12.0 kJ/m <sup>2</sup>	5.71 ft-lb/in <sup>2</sup>	
Izod Impact, Unnotched (ISO)	40.0 kJ/m <sup>2</sup>	19.0 ft-lb/in <sup>2</sup>	
Charpy Impact Unnotched	4.60 J/cm <sup>2</sup>	21.9 ft-lb/in <sup>2</sup>	
Charpy Impact, Notched	1.30 J/cm <sup>2</sup>	6.19 ft-lb/in <sup>2</sup>	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	21.0 Åµm/m-Å°C	11.7 Åµin/in-Å°F	
	@Temperature -30.0 - 30.0 Å°C	@Temperature -22.0 - 86.0 Å°F	
CTE, linear, Transverse to Flow	57.0 Åµm/m-Å°C	31.7 Åµin/in-Å°F	
Deflection Temperature at 0.46 MPa (66 psi)	265 Å°C	509 Å°F	

Thermal Properties <small>Deflection Temperature at 1.8 MPa (204 psi)</small>	Metric °C	English	Comments
UL RTI, Electrical	110 Â°C	230 Â°F	UL746B
UL RTI, Mechanical with Impact	110 Â°C	230 Â°F	UL746B
UL RTI, Mechanical without Impact	110 Â°C	230 Â°F	UL746B
Flammability, UL94	HB @Thickness 0.750 mm	HB @Thickness 0.0295 in	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+16 ohm-cm	1.00e+16 ohm-cm	
Dielectric Constant	3.1	3.1	
Dielectric Strength	45.0 kV/mm	1140 kV/in	ASTM D145
Dissipation Factor	0.0010	0.0010	IEC 60250
Arc Resistance	120 - 180 sec	120 - 180 sec	ASTM D495
Comparative Tracking Index	>= 600 V	>= 600 V	IEC 60112
Hot Wire Ignition, HWI	30 - 60 sec @Thickness 1.50 mm	30 - 60 sec @Thickness 0.0591 in	UL 746A
High Amp Arc Ignition, HAI	>= 120 arcs @Thickness 1.50 mm	>= 120 arcs @Thickness 0.0591 in	UL 746A
High Voltage Arc-Tracking Rate, HVTR	0.000 - 10.0 mm/min	0.000 - 0.394 in/min	UL746A

Processing Properties	Metric	English	Comments
Melt Temperature	280 - 310 Â°C	536 - 590 Â°F	
Mold Temperature	50.0 - 80.0 Â°C	122 - 176 Â°F	
	130 - 155 Â°C	266 - 311 Â°F	For optimal surface finish

Descriptive Properties	Value	Comments
Comments	NSF61	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China