

## Shinil Chemical SHINCON PEEK-CF LCD Rack

Category: Polymer, Thermoplastic, Polyketone, Polyetheretherketone (PEEK), Polyetheretherketone, PEEK, Carbon Fiber Filled

## **Material Notes:**

LCD Rack is used to transfer or bake LCD frame in the electronic assembly or LCD packaging assembly line. Current LCD Rack is made of poly ether ether ketone (PEEK) with carbon fiber (CF). Since both materials cost high, there is a need to design the material with cost effectiveness. Also, the current LCD Rack has a concern of sloughing by CF particulates. SHINIL sloves these problems with the CNT composite of polyphenylene sulfide (PPS), polyether sulfone (PES), PEEK, or polyether imide (PEI) by providing the cost effectiveness combined with enhanced mechanical properties. Especially, the wear resistance (coefficient of friction, coefficient of abrasion) of SHINIL CNT composite was much lower than the current PEEK material, which will provide the material for clean/dust free LCD operation environments. Features and Benefits Permanent electro conductivity Improved mechanical properties No particulates and no sloughing Lighter weight Recyclability Low abrasion and friction Improved surface Cost effective Information Provided by Shinil Chemical Industry Co., Ltd.

Order this product through the following link:

http://www.lookpolymers.com/polymer\_Shinil-Chemical-SHINCON-PEEK-CF-LCD-Rack.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.43 g/cc	1.43 g/cc	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	245 MPa	35600 psi	
Flexural Strength	343.35 MPa	49799 psi	
Flexural Modulus	17.7 GPa	2560 ksi	
Izod Impact, Notched	0.883 J/cm	1.65 ft-lb/in	
	0.166	0.166	
Coefficient of Friction, Dynamic	@Time 3600 sec, Pressure 1.96 MPa	@Time 1.00 hour, Pressure 284 psi	0.2 m/s

Thermal Properties	Metric	English	Comments	
Deflection Temperature at 1.8 MPa (264 psi)	240 °C	464 °F		

Electrical Properties	Metric	English	Comments	
Volume Resistivity	1e+05	1e+05		

Processing Properties	Metric	English	Comments	
Processing Temperature	390 °C	734 °F		



Descriptive Properties	Value	Comments
Abrasion Weight (g)	0.0015	Wear Tester 0.2m/s; 20kgf/cm <sup>2</sup> ; 1hr
Coefficient of Abrasion (10-3 cm2-sec/kgf-m-hr)	0.1358	Wear Tester 0.2m/s; 20kgf/cm <sup>2</sup> ; 1hr

## **Contact Songhan Plastic Technology Co.,Ltd.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

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