

Miramid® SE50CW

Polyamide 66

BASF Leuna GmbH

Message:

Miramid® SE50CW is a Polyamide 66 (Nylon 66) material filled with 50% glass fiber. It is available in Europe for injection molding.

Important attributes of Miramid® SE50CW are:

Flame Rated

Chemical Resistant

Crystalline

Fast Molding Cycle

Good Dimensional Stability

Typical application of Miramid® SE50CW: Automotive

General Information				
Filler / Reinforcement		Glass Fiber,50% Filler by Weight		
Additive		Heat Stabilizer		
		Mold Release		
Features		Crystalline		
		Fast Molding Cycle		
		Fuel Resistant		
		Good Dimensional Stability		
		Good Flow		
		Good Stiffness		
		Grease Resistant		
		Heat Stabilized		
		High Rigidity		
		Oil Resistant		
		Solvent Resistant		
Uses		Automotive Applications		
Forms		Granules		
Processing Method		Injection Molding		
Physical	Dry	Conditioned	Unit	Test Method
Density	1570	--	kg/m³	ISO 1183 ¹
Water Absorption				ISO 62 ²
Saturation	4.0	--	%	
Equilibrium	1.0	--	%	
Viscosity number	140	--	cm³/g	ISO 307, 1157, 1628 ³
Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness	280	--	MPa	ISO 2039-1
Mechanical	Dry	Conditioned	Unit	Test Method

Tensile modulus	16000	12500	MPa	ISO 527-2 ⁴
Tensile Stress (Break)	210	160	MPa	ISO 527-2 ⁵
Tensile Strain (Break)	2.0	2.5	%	ISO 527-2 ⁶
Flexural Stress ⁷	330	250	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy notched impact strength				ISO 179/1eA ⁸
-30°C	10.0	--	kJ/m ²	
23°C	12.0	13.0	kJ/m ²	
Charpy impact strength				ISO 179/1eU ⁹
-30°C	80.0	--	kJ/m ²	
23°C	80.0	85.0	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2 ¹⁰
0.45 MPa	250	--	°C	
1.8 MPa	250	--	°C	
Continuous Use Temperature				ISO 2578
-- ¹¹	130	--	°C	
-- ¹²	160	--	°C	
-- ¹³	240	--	°C	
Melting Temperature (DSC)	260	--	°C	ISO 3146
Electrical	Dry	Conditioned	Unit	Test Method
Volume resistivity	1.0E+13	1.0E+10	ohms · m	IEC 60093 ¹⁴
Dielectric Constant (1 MHz)	3.80	6.60		IEC 60250
Dissipation Factor (1 MHz)	0.015	0.30		IEC 60250 ¹⁵
Comparative tracking index	450	--		IEC 60112 ¹⁶
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (1.00 mm)	< 100	--	mm/min	FMVSS 302
Flame Rating (1.50 mm)	HB	--		UL 94
Burning Behav. at thickness h (1.50 mm)	HB	--		ISO 1210 ¹⁷
Glow Wire Flammability Index (1.00 mm)	650	--	°C	IEC 60695-2-12
Injection	Dry	Unit		
Processing (Melt) Temp	280 to 300		°C	
Mold Temperature	80.0 to 100		°C	
NOTE				
1.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.			
2.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.			

3.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
4.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
5.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
6.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
7.	Typical values for uncoloured product at 23°C and 50% relative humidity
8.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
9.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
10.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
11.	Temperature index at loss of 50% tensile strength, 20000h
12.	Temperature index at loss of 50% tensile strength, 5000h
13.	Short time
14.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
15.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
16.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
17.	Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

