

Schmolz + Bickenbach Formadur® 2311 Plastic Mold Steel

Category : Metal , Ferrous Metal , Tool Steel , Mold Steel

Material Notes:

Description: Formadur® 2311 is a pre-hardened plastic mold steel
 Characteristics: Good texturing compared to Formadur®2312 and Good polishability compared to Formadur® 231
 Applications: Injection molds, Compression molds, Blow mold, Mold bases and Die holder
 Information provided by Schmolz + Bickenbach

Order this product through the following link:

http://www.lookpolymers.com/polymer_Schmolz-Bickenbach-Formadur-2311-Plastic-Mold-Steel.php

Physical Properties	Metric	English	Comments
Density	7.83 g/cc	0.283 lb/in ³	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell C	28	28	
	@Treatment Temp. 700.0 °C, Time 7200 sec	@Treatment Temp. 1292 °F, Time 2.00 hour	
	36	36	
	@Treatment Temp. 600.0 °C, Time 7200 sec	@Treatment Temp. 1112 °F, Time 2.00 hour	
	42	42	
	@Treatment Temp. 500 °C, Time 7200 sec	@Treatment Temp. 932 °F, Time 2.00 hour	
	46	46	
	@Treatment Temp. 400 °C, Time 7200 sec	@Treatment Temp. 752 °F, Time 2.00 hour	
48	48		
@Treatment Temp. 300 °C, Time 7200 sec	@Treatment Temp. 572 °F, Time 2.00 hour		
50	50		
@Treatment Temp. 200 °C, Time 7200 sec	@Treatment Temp. 392 °F, Time 2.00 hour		
51	51		
@Treatment Temp. 100 °C, Time 7200 sec	@Treatment Temp. 212 °F, Time 2.00 hour		

Mechanical Properties	Metric	English	Comments
	848 MPa	123000 psi	
	@Treatment Temp. 700.0 °C	@Treatment Temp. 1292 °F	28 HRC
	1140 MPa	165000 psi	
	@Treatment Temp. 600.0 °C	@Treatment Temp. 1112 °F	36 HRC
	1330 MPa	193000 psi	
	@Treatment Temp. 500 °C	@Treatment Temp. 932 °F	42 HRC
	1480 MPa	215000 psi	
	@Treatment Temp. 400 °C	@Treatment Temp. 752 °F	46 HRC
	1570 MPa	228000 psi	
	@Treatment Temp. 300 °C	@Treatment Temp. 572 °F	48 HRC
	1670 MPa	242000 psi	
	@Treatment Temp. 200 °C	@Treatment Temp. 392 °F	50 HRC
	1730 MPa	251000 psi	
	@Treatment Temp. 100 °C	@Treatment Temp. 212 °F	51 HRC

Thermal Properties	Metric	English	Comments
CTE, linear	12.2 µm/m-°C	6.80 µin/in-°F	
	@Temperature 21.1 - 93.3 °C	@Temperature 70.0 - 200 °F	
	13.0 µm/m-°C	7.20 µin/in-°F	
	@Temperature 21.1 - 204 °C	@Temperature 70.0 - 400 °F	
	13.3 µm/m-°C	7.40 µin/in-°F	
	@Temperature 21.1 - 302 °C	@Temperature 70.0 - 575 °F	
Thermal Conductivity	31.8 W/m-K	221 BTU-in/hr-ft ² -°F	
	@Temperature 302 °C	@Temperature 575 °F	
	33.6 W/m-K	233 BTU-in/hr-ft ² -°F	
	@Temperature 204 °C	@Temperature 400 °F	

Thermal Properties	Metric	English	Comments
	33.9 W/m-K	230 BTU-in/hr-ft ² -°F	
	@Temperature 100 °C	@Temperature 212 °F	

Component Elements Properties	Metric	English	Comments
Carbon, C	0.40 %	0.40 %	
Chromium, Cr	1.9 %	1.9 %	
Iron, Fe	96 %	96 %	
Manganese, Mn	1.5 %	1.5 %	
Molybdenum, Mo	0.20 %	0.20 %	

Processing Properties	Metric	English	Comments
Annealing Temperature	710 - 740.6 °C	1310 - 1365 °F	Cooling: Furnace; < 235 HB

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