

DIALAC® ESA20

Acrylonitrile Ethylene Styrene

UMG ABS, Ltd.

Message:

DIALAC® ESA20 is an Acrylonitrile Ethylene Styrene (AES) material. It is available in Asia Pacific or North America for injection molding.

Important attributes of DIALAC® ESA20 are:

Flame Rated

RoHS Compliant

General Information			
RoHS Compliance	RoHS Compliant		
UL File Number	E47016		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.05	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	22.0	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (23°C)	0.60 to 0.70	%	ISO 294-4
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C)	110		ISO 2039-2
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2600	MPa	ISO 527-2
Tensile Stress (23°C)	50.0	MPa	ISO 527-2
Flexural Modulus ¹ (23°C)	2700	MPa	ISO 178
Flexural Stress ² (23°C)	80.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	4.0	kJ/m ²	
23°C	11	kJ/m ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	83.0	°C	ISO 75-2/Af
CLTE - Flow	7.0E-5	cm/cm/°C	ISO 11359-2
Flammability	Nominal Value		Test Method
Flame Rating (1.50 mm)	HB		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	85.0 to 90.0	°C	
Drying Time	3.0 to 4.0	hr	
Rear Temperature	190 to 210	°C	
Middle Temperature	210 to 230	°C	
Front Temperature	220 to 250	°C	

Nozzle Temperature	200 to 230	°C
Processing (Melt) Temp	220 to 260	°C
Mold Temperature	50.0 to 60.0	°C
Injection Pressure	70.0 to 140	MPa
Injection Rate	Moderate	
Back Pressure	5.00 to 15.0	MPa
Screw Speed	50 to 100	rpm

NOTE

1. 2.0 mm/min
2. 2.0 mm/min

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Recommended distributors for this material

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