



CYCOLAC™ RESIN FR15U

REGION EUROPE

DESCRIPTION

Flame retardant ABS. Excellent indoor UV properties. Excellent moldability. UL94V-0/5VA rated. Elevated UL RTI rating.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield, 50 mm/min	41	MPa	ISO 527
Tensile Strain, break, 50 mm/min	22	%	ISO 527
Tensile Modulus, 1 mm/min	2210	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	63	MPa	ISO 178
Flexural Modulus, 2 mm/min	2260	MPa	ISO 178
IMPACT			
Izod Impact, notched 80*10*4 +23°C	12	kJ/m ²	ISO 180/1A
THERMAL			
Thermal Conductivity	0.2	W/m-°C	ISO 8302
Vicat Softening Temp, Rate B/50	92	°C	ISO 306
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.4 – 0.7	%	SABIC method
Density	1.19	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	1	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Flow Rate, 220°C/5.0 kg	7	g/10 min	ISO 1133
Melt Volume Rate, MVR at 220°C/10.0 kg	40	cm ³ /10 min	ISO 1133
ELECTRICAL			
Volume Resistivity	1.E+14	Ohm-cm	IEC 60093
Dielectric Strength, in oil, 3.2 mm	20	kV/mm	IEC 60243-1
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94-5VA Rating (3)	2.8	mm	UL 94
Oxygen Index (LOI)	26	%	ISO 4589



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INJECTION MOLDING			
Drying Temperature	80 – 85	°C	
Drying Time	2 – 4	hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	200 – 230	°C	
Nozzle Temperature	190 – 220	°C	
Front - Zone 3 Temperature	195 – 225	°C	
Middle - Zone 2 Temperature	195 – 225	°C	
Rear - Zone 1 Temperature	180 – 210	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	40 – 80	°C	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.