

**Technical information, February 2007**

**UL-94 listing Makrolon® GP/FG sheet**

Regarding the UL-94 listing of Makrolon® GP/FG sheet, we refer to the UL-94 listings of the resin producers as listed in the Yellow Cards below.

Following GP/FG-colours are made out of the below mentioned materials:

Colour	Thickness	Material type
GP clear 099	≤ 1 mm	2603+(f1)
GP clear 099	≥ 1.5 mm	3103+(f1)
GP grey 760	≥ 1.5 mm	3103+(f1)
GP bronze 850	≥ 1.5 mm	3103+(f1)
FG clear	≥ 1.5 mm	3108+

For other colours, please contact our Technical Support.

QMFZ2 Component - Plastics		Friday, October 24, 2003				E41613			
<b>BAYER MATERIALSCIENCE AG</b>									
THERMOPLASTICS TESTING CENTER (TTC) GEBAEUDE R33 RHEINUFERSTRASSE 7-9 47829 KREFELD GERMANY									
Material Designation: <b>3100+(f1), 3103+(f1), 3105+(f2), 3107+(f1), 3108+</b>									
Product Description: Polycarbonate (PC), designated "Makrolon" furnished as pellets.									
Color	Min. Thick. (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str	IEC GWIT	IEC GWFI
ALL	0.75	V-2	-	-	-	-	-	-	-
	1.5	HB	3	0	125	115	125	-	-
	3.0	HB	2	0	125	115	125	-	-
	6.0	HB	0	0	125	115	125	-	-
<b>CTI: 2</b>		<b>HVTR: 0</b>		<b>D495: 6</b>			IEC Ball Pressure (°C): -		
Dielectric Strength (kV/mm): -		Volume Resistivity (10 <sup>9</sup> ohm-cm): -				Dimensional Stability(%): -			
ISO Tensile Strength (MPa): -		ISO Flexural Strength (MPa): -				ISO Heat Deflection (°C): -			
ISO Tensile Impact (kJ/m <sup>2</sup> ): -		ISO Izod Impact (kJ/m <sup>2</sup> ): -				ISO Charpy Impact (kJ/m <sup>2</sup> ): -			
(f1)	Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.								
(f2)	Subjected to one or more of the following tests: Ultraviolet Light, Water Exposure or Immersion in accordance with UL 746C, where the acceptability for outdoor use is to be determined by UL Inc.								
+	Material designations may be followed by suffix numbers and/or letters denoting color.								
Report Date: 8/22/1969		Underwriters Laboratories Inc®							
UL94 small-scale test data does not pertain to building materials, furnishings and related contents. UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in components and parts of end-product devices and appliances, where the acceptability of the combination is determined by ULI.									

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**BAYER MATERIALSCIENCE AG**  
 THERMOPLASTICS TESTING CENTER (TTC) GEBAEUDE R33 RHEINUFERSTRASSE 7-9 47829 KREFELD GERMANY

Material Designation: **2600+(f1), 2603+(f1), 2607+(f1), 2608+, 2658+**

Product Description: Polycarbonate (PC), designated "Makrolon" furnished as pellets.

Color	Min. Thick. (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str	IEC GWIT	IEC GWFI
ALL	0.75	V-2	-	-	125	115	125	-	-
	1.5	V-2	3	0	125	115	125	-	-
	2.5	HB	3	0	125	115	125	-	-
	3.0	HB	2	0	125	115	125	-	-
	6.0	HB	0	0	125	115	125	-	-

**CTI: 2** **HVTR: 0** **D495: 5** **IEC Ball Pressure (°C): -**

**Dielectric Strength (kV/mm): 25** **Volume Resistivity (10<sup>9</sup>ohm-cm): -** **Dimensional Stability(%): 0.0**  
**ISO Tensile Strength (MPa): -** **ISO Flexural Strength (MPa): -** **ISO Heat Deflection (°C): -**  
**ISO Tensile Impact (kJ/m<sup>2</sup>): -** **ISO Izod Impact (kJ/m<sup>2</sup>): -** **ISO Charpy Impact (kJ/m<sup>2</sup>): -**

(f1) Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.  
 + Material designations may be followed by suffix numbers and/or letters denoting color.

Report Date: 8/22/1969 Underwriters Laboratories Inc®

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