# Plenco 06401 (Compression)



# **Plastics Engineering Co.**



## **Technical Data**

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Processing Method

PLENCO 06401 is a glass fiber and mineral filled two-stage phenolic molding compound. UL recognized under component file E40654. 06401 is available in black.

General
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General	
Material Status	Commercial: Active
Literature <sup>1</sup>	Technical Datasheet (English)
UL Yellow Card <sup>2</sup>	• E40654-231621
Search for UL Yellow Card	<ul><li>Plastics Engineering Co.</li><li>Plenco</li></ul>
Availability	North America
Filler / Reinforcement	Glass Fiber     Mineral
UL File Number	• E40654
Appearance	Black
Forms	Briquette

· Compression Molding

Tensile Modulus Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength Compressive Strength Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow	1.75 g/cm³ 0.75 g/cm³ 0.14 % 0.070 % 0.050 % Nominal Value Unit 14700 MPa 73.0 MPa 0.60 % 13500 MPa	ASTM D792 ASTM D1895 ASTM D6289 ASTM D570 ASTM D6289 Test Method ASTM D638 ASTM D638
Molding Shrinkage - Flow Water Absorption (24 hr) Post Shrinkage - 72hr (120°C)  Mechanical Tensile Modulus Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Modulus Flexural Strength Compressive Strength Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	0.14 % 0.070 % 0.050 % Nominal Value Unit 14700 MPa 73.0 MPa 0.60 %	ASTM D6289 ASTM D570 ASTM D6289 Test Method ASTM D638
Water Absorption (24 hr) Post Shrinkage - 72hr (120°C)  Mechanical  Tensile Modulus Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength Compressive Strength Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	0.070 % 0.050 % Nominal Value Unit 14700 MPa 73.0 MPa 0.60 %	ASTM D570 ASTM D6289 Test Method ASTM D638
Post Shrinkage - 72hr (120°C)  Mechanical  Tensile Modulus  Tensile Strength  Tensile Elongation (Break)  Flexural Modulus  Flexural Strength  Compressive Strength  Impact  Charpy Notched Impact Strength  Notched Izod Impact  Drop Ball Impact  Hardness  Rockwell Hardness (E-Scale)  Thermal  Deflection Temperature Under Load  1.8 MPa, Unannealed  Continuous Use Temperature  CLTE - Flow  Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))	0.050 %  Nominal Value Unit  14700 MPa  73.0 MPa  0.60 %	ASTM D6289 Test Method ASTM D638
Mechanical Tensile Modulus Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength Compressive Strength Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	Nominal Value Unit 14700 MPa 73.0 MPa 0.60 %	Test Method ASTM D638
Tensile Modulus Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength Compressive Strength Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	14700 MPa 73.0 MPa 0.60 %	ASTM D638
Tensile Strength Tensile Elongation (Break) Flexural Modulus Flexural Strength Compressive Strength Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	73.0 MPa 0.60 %	
Tensile Elongation (Break)  Flexural Modulus  Flexural Strength  Compressive Strength  Impact  Charpy Notched Impact Strength  Notched Izod Impact  Drop Ball Impact  Hardness  Rockwell Hardness (E-Scale)  Thermal  Deflection Temperature Under Load  1.8 MPa, Unannealed  Continuous Use Temperature  CLTE - Flow  Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))	0.60 %	ASTM D638
Flexural Modulus Flexural Strength Compressive Strength Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))		
Flexural Strength Compressive Strength  Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	13500 MPa	ASTM D638
Compressive Strength Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))		ASTM D790
Impact Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	122 MPa	ASTM D790
Charpy Notched Impact Strength Notched Izod Impact Drop Ball Impact  Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	255 MPa	ASTM D695
Notched Izod Impact Drop Ball Impact Hardness Rockwell Hardness (E-Scale) Thermal Deflection Temperature Under Load 1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	Nominal Value Unit	Test Method
Drop Ball Impact  Hardness  Rockwell Hardness (E-Scale)  Thermal  Deflection Temperature Under Load  1.8 MPa, Unannealed  Continuous Use Temperature  CLTE - Flow  Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))	39.4 J/m	ASTM D256
Hardness  Rockwell Hardness (E-Scale)  Thermal  Deflection Temperature Under Load  1.8 MPa, Unannealed  Continuous Use Temperature  CLTE - Flow  Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))	39 J/m	ASTM D256
Rockwell Hardness (E-Scale)  Thermal  Deflection Temperature Under Load  1.8 MPa, Unannealed  Continuous Use Temperature  CLTE - Flow  Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))	273 J/m	Internal Method
Thermal  Deflection Temperature Under Load  1.8 MPa, Unannealed  Continuous Use Temperature  CLTE - Flow  Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))	Nominal Value Unit	Test Method
Deflection Temperature Under Load  1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	98	ASTM D785
1.8 MPa, Unannealed Continuous Use Temperature CLTE - Flow Electrical Volume Resistivity Dielectric Strength (Method A (Short-Time))	Nominal Value Unit	Test Method
Continuous Use Temperature  CLTE - Flow  Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))		ASTM D648
CLTE - Flow  Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))	228 °C	
Electrical  Volume Resistivity  Dielectric Strength (Method A (Short-Time))	227 °C	ASTM D794
Volume Resistivity Dielectric Strength (Method A (Short-Time))	3.8E-5 cm/cm/°C	ASTM E831
Dielectric Strength (Method A (Short-Time))	Nominal Value Unit	Test Method
	3.1E+12 ohms·cm	ASTM D257
Dielectric Constant (1 MHz)	15 kV/mm	ASTM D149
	5.20	ASTM D150
Dissipation Factor (1 MHz)	0.025	ASTM D150
Arc Resistance	104 sec	ASTM D495
Comparative Tracking Index		ASTM D3638
Flammability	180 V	Test Method
Flame Rating (1.5 mm)	180 V Nominal Value Unit	UL 94

Form No. TDS-80862-en

# Plenco 06401 (Compression)

Phenolic

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#### **Notes**

- <sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- <sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.
- <sup>3</sup> Typical properties: these are not to be construed as specifications.



# Plenco 06401 (Compression)

Phenolic

Plastics Engineering Co.



Where to Buy

## Supplier

Plastics Engineering Co. Sheboygan, Sheboygan USA Telephone: 920-458-2121 Web: http://www.plenco.com/

#### Distributor

Please contact the supplier to find a distributor for Plenco 06401 (Compression)

