

GEON® Flex WEMB410U

GEON Performance Solutions - Flexible Polyvinyl Chloride

Tuesday, June 18, 2024

General Information

Product Description

Product GEON WEMB410U is a non lead stabilized fPVC in all colors except clear or translucent. Suitable for use as insulation for type TEW, 105°C, 600V, FT1, and type AWM, I, A/B, 105°C, 600V, FT1, having a 0.76 mm (0.030 inch) or thicker insulation wall.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Flame Retardant	• Low (to None) Lead Content	
Uses	• Appliance Wire Insulation • Building Wire Insulation	• Equipment Wire • Insulation	• Wet Rated Insulation • Wire & Cable Applications
Wire Types	• AWM	• FT-1	• TEW
Wire Types	• THHN • THHW • THW	• THW-2 • THWN • THWN-2	• TW
Agency Ratings	• UL I Oil Rating	• UL QMTT2	• UL VW-1
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Extrusion	• Extrusion Coating	

ASTM & ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.32	1.32	ASTM D792
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	3000 psi	20.7 MPa	ASTM D638
Tensile Elongation ² (Break)	300 %	300 %	ASTM D638
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 15 sec	91	91	
Shore D, 15 sec	38	38	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-4.00 °F	-20.0 °C	ASTM D746
UL Temperature Rating	221 °F	105 °C	
Aging	Nominal Value (English)	Nominal Value (SI)	
Retention of Tensile Elongation ³ 277°F (136°C), 30.0 mil (762.0 µm)	90 %	90 %	
Retention of Tensile Strength ³ 277°F (136°C), 30.0 mil (762.0 µm)	110 %	110 %	
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Volume Resistivity	5.6E+15 ohms·cm	5.6E+15 ohms·cm	ASTM D257
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Oxygen Index (0.125 in (3.18 mm))	31 %	31 %	ASTM D2863

Additional Information

NOTE: Typical Properties of Molded Slab (0.075"); Not to be Construed as Specifications.

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Processing Information		
Extrusion	Nominal Value (English)	Nominal Value (SI)
Melt Temperature	350 to 370 °F	177 to 188 °C

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² Type IV, 20 in/min (510 mm/min)
- ³ 168 hr, UL Standard

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