

GEON® Flex WEMB410B

GEON Performance Solutions - Flexible Polyvinyl Chloride

Tuesday, June 18, 2024

General Information

Product Description

GEON® Vinyl Wire & Cable WEMB410B is a Flexible Polyvinyl Chloride product. It can be processed by extrusion or extrusion coating and is available in Africa & Middle East, Asia Pacific, Europe, Latin America, or North America. Typical application: Wire & Cable.

Characteristics include:

RoHS Compliant, THWN, THWN-2, THHN, THHW, THW, THW-2, TW,

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Flame Retardant		
Uses	• Building Wire Insulation • Insulation	• Wet Rated Insulation • Wire & Cable Applications	
Wire Types	• AWM • 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	1.31	1.31	ASTM D792
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	3200 psi	22.1 MPa	ASTM D638
Tensile Elongation ² (Break)	380 %	380 %	ASTM D638
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 15 sec	94	94	
Shore D, 15 sec	42	42	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	-0.400 °F	-18.0 °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))	29 %	29 %	ASTM D2863

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Additional Information

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

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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