



# Geon™ Vinyl Wire & Cable WEMB410B

## Flexible Polyvinyl Chloride

### Key Characteristics

#### Product Description

Geon™ Vinyl Wire & Cable WEMB410A 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		
Regional 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	• 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	

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.31	1.31	ASTM D792
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	3200 psi	22.1 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	380 %	380 %	ASTM D638
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore A, 15 sec	93	93	
Shore D, 15 sec	44	44	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Brittleness Temperature	3.20 °F	-16.0 °C	ASTM D746
UL Temperature Rating	221 °F	105 °C	
Aging	Typical Value (English)	Typical Value (SI)	
Retention of Tensile Elongation <sup>3</sup> 277°F (136°C), 30.0 mil (762.0 µm)	90 %	90 %	
Retention of Tensile Strength <sup>3</sup> 277°F (136°C), 30.0 mil (762.0 µm)	110 %	110 %	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Volume Resistivity	5.6E+15 ohms·cm	5.6E+15 ohms·cm	ASTM D257
Flammability	Typical Value (English)	Typical 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	Typical Value (English)	Typical Value (SI)
Melt Temperature	350 to 370 °F	177 to 188 °C

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type IV, 20 in/min (510 mm/min)

<sup>3</sup> 168 hr, UL Standard

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