



# RavaSafe® ZH TPU 85A R112M

## Ravago Manufacturing Europe - Thermoplastic Polyurethane Elastomer

(Polyether)

### General Information

#### Product Description

Description: Halogen free flame retardant polyether based thermoplastic polyurethane having outstanding UV and hydrolysis resistance, excellent mechanical properties, low temperature flexibility, and high resistance to micro-organisms designed for cable jacketing applications.

Application: Wire & Cable

#### General

Material Status	• Commercial: Active		
Availability	• Europe	• Latin America	• North America
Additive	• Flame Retardant		
Features	• Flame Retardant • Halogen Free	• Hydrolysis Resistant • Low Temperature Flexibility	• Microbe Resistant • UV Resistant
Uses	• Wire & Cable Applications		
Processing Method	• Extrusion		

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

Physical	Nominal Value	Unit	Test Method
Density	1.12	g/cm <sup>3</sup>	ISO 1183/A
Mechanical	Nominal Value	Unit	Test Method
Abrasion Resistance	50.0	mm <sup>3</sup>	ISO 4649
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	6.00	MPa	ISO 37
Tensile Stress (300% Strain)	10.6	MPa	ISO 37
Tensile Stress (Break)	39.0	MPa	ISO 37
Tensile Elongation (Break)	640	%	ISO 37
Tear Strength <sup>2</sup>	97.0	kN/m	ISO 34-1
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (-40°C)	No Break		ISO 179/1A
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A)	87		ISO 868
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.6 mm)	• V-2 • V-1		UL 94
Oxygen Index	23	%	ISO 4589-2

### Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	80 to 90	°C
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Cylinder Zone 1 Temp.	185 to 205	°C
Cylinder Zone 2 Temp.	195 to 215	°C
Cylinder Zone 3 Temp.	195 to 215	°C