



Marco Compound # P1011

80 Durometer, Translucent Yellow, General Use Polyurethane

Technical Datasheet

Common Names:

Polyurethane (AU, EU)

General description:

Polyurethane is a widely used compound due to its superior strength, tear and abrasion resistance. Polyurethane also provides excellent permeation resistance. Marco compound P1011 is an 80 durometer Polyether type millable gum Polyurethane compound. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

Features:

- Good hydraulic oil and gasoline resistance
- Resistant to pure aliphatic hydrocarbons (propane, butane, fuel)
- Resistance to mineral and silicone oils and greases
- Resistant to water, oxygen, ozone and aging
- Excellent tear and abrasion resistance

Limitations:

- Not compatible with acids, ketones, esters, ethers, alcohols, glycols
- Hot water, steam, alkalis and amines

Service Temperature:

-65 to 225°F

Specification

ASTM D2000

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	Specification Requirements	Typical Test Results
Hardness, Shore A	80 +/- 5	82
Color	Translucent Yellow	Translucent Yellow
Tensile Strength, psi	2000 min.	3842
Ultimate Elongation, %	200 min.	286

HEAT RESISTANCE – ASTM D 573 (70 hrs. @ 100°C)	Specification Requirements	Typical Test Results
Hardness Change, points	+/-5 max.	+1
Tensile Strength Change, %	+15 max.	+5
Ultimate Elongation Change, %	-15 max.	-5

COMPRESSION SET – ASTM D 395 Method B (70 hrs. @ 212°F)	Specification Requirements	Typical Test Results
Permanent Set, %	40 max.	31

OIL RESISTANCE –ASTM # 1 Oil – ASTM D 471 (70 hrs. @ 212° F)	Specification Requirements	Typical Test Results
Hardness Change, points	-5 to +10	-1
Tensile Strength Change, %	-25 max.	+1
Ultimate Elongation Change, %	-45 max.	-4
Volume Change, %	-10 to +5	-4

OIL RESISTANCE –ASTM # 3 Oil – ASTM D 471 (70 hrs. @ 212° F)	Specification Requirements	Typical Test Results
Hardness Change, points	-10 to +5	-1
Tensile Strength Change, %	-45 max.	-3
Ultimate Elongation Change, %	-45 max.	+2
Volume Change, %	0 to +25	+5

Date: 2016-6-15