Request a Quote

(800) 775-6525 Fax: (800) 421-2923
engineering@marcorubber.com
www.marcorubber.com

Marco Compound # R1010

90 Durometer, Black, ED Resistant HNBR Nitrile
Technical Datasheet

Description

R1010 is a peroxide-cured explosive decompression resistant HNBR compound. R1010 provides good chemical resistance to sour gas (H2S), crude oil, lubricating agents and oil additives with superior resistance to carbon dioxide, water, drilling mud and amine corrosion inhibitors.

Features and Benefits

- Excellent Explosion decompression resistance
- Higher resistance to heat and weather than standard Nitrile
- Good chemical resistance especially to oil and fuels
- High mechanical strength
- High abrasion resistance

Typical Applications

- Low temperature and high pressure environments
- Exploration and drilling equipment
- Cementing and completion equipment
- Subsea valves and pumps
- Blow-out preventers (BOP's)
- Mud motors
- Dynamic seals

Service Temperature:

-65 to 325° F

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	Units	Typical Test Results
Hardness	Shore A	91
Color		Black
Tensile Strength	psi	3,315
Ultimate Elongation	%	100
Compression Set at 150° C / 24hrs. (ASTM D395 B/1)	%	12
Compression Set at 125° C / 70hrs. (ASTM D395 B/1)	%	21
Compression Set at 150° C / 70hrs. (ASTM D395 B/1)	%	32
Low Temperature Torsion Modulus, T70	°F	-40
Brittle Point	°F	-67

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HEAT RESISTANCE –ASTM D 573 (94 hrs. @ 150°C)	Units	Typical Test Results
Hardness Change, points	Shore A	+5
Tensile Strength Change	%	+10
Ultimate Elongation Change	%	-25

FLUID RESISTANCE, Pentanol – ASTM D 471 (70 hrs. @ 23°C)	Units	Typical Test Results
Hardness Change, points	%	-10
Volume Change	%	-25

FLUID RESISTANCE – Pentosin – ASTM D 471 (96 hrs. @ 140°C)	Units	Typical Test Results
Hardness Change, points	%	-4
Tensile Strength Change	%	-10
Ultimate Elongation Change	%	-15
Weight Change	%	+8.5
Volume Change	%	+13

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