

Hydrogenated Nitrile was specifically developed for increased temperature resistance and better compatibility with new automotive fuels. Hydrogenated Nitrile also offers higher strength and minimal degradation at high temperatures.

ABOUT #R1008

Our R1008 compound is a peroxide-cured explosive decompression resistant HNBR. R1008 provides good chemical resistance crude oil, lubricating agents and oil additives with superior resistance to carbon dioxide, water, drilling mud and amine corrosion inhibitors.

FEATURES

- Extended temperature capabilities
- Tested to Norsok M-710 standard for Explosive Decompression
- Enhanced chemical compatibility with new automotive fuels.
- Good/Excellent resistance to compression set and tear/abrasion.

APPLICATION EXAMPLES

- Hydraulic applications
- High pressure CO2 applications
- Dynamic applications

ADDITIONAL INFORMATION

- Service Temperature of -15° to 325°F
- Cure System: Peroxide
- Spec: ASTM D2000 M2DH920 A26 B16 B36 E016 E036

This information is accurate and reliable to the best of our knowledge. However, Marco Rubber makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use.

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	90 ± 5	88
Color	Black	Black
Tensile Strength, psi	2900 min.	4536
Ultimate Elongation, %	100 min.	170
Modulus @ 100%, psi	---	2612
Specific Gravity (g/cm ³)	---	1.29
HEAT RESISTANCE – A26, ASTM D 573 (70 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	10	-1
Tensile Strength Change, %	-25	-8
Ultimate Elongation Change, %	-30	-13
COMPRESSION SET – B16, ASTM D 325 Method B (22 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set % (Button)	30 max.	19.5
COMPRESSION SET – B36, ASTM D 325 Method B (22 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set % (Plied)	0.5	29
FLUID RESISTANCE –IRM 901 Oil – E016, ASTM D 471 (70 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	-5 to +10	-1
Tensile Strength Change, %	-20 max.	-7
Ultimate Elongation Change, %	-30 max.	-5
Volume Change, %	+/- 5	-0.7
FLUID RESISTANCE –IRM 903 Oil – E036, ASTM D 471 (70 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	-15 max.	-10
Tensile Strength Change, %	-40 max.	-17
Ultimate Elongation Change, %	-40 max.	-16
Volume Change, %	+25 max.	+11.5