GLOBAL O-RING and SEAL
ALL-AROUND BETTER

www.GlobalOring.com • info@GlobalORing.com
14450 John F Kennedy Blvd, Houston, TX 77032
Phone: 832-448-5550 • Fax: 832-448-5551

Material Datasheet

Compound #: H80-E101 — HNBR, Black, Heat/Chemical Resistance

Material Summary		
Material Type:	HNBR	
Durometer:	80	
Color:	Black	
Special Properties:	Heat/Chemical Resistance	
Recommended Temperature Range (Static):	-40°C (-40°F) to 160°C (320°F)	
Cure System:	Sulfur	
Meets Specification:	ASTM D2000 M3DH810 A26 B16 EO16 EO36 Z1	
(A26) Original Properties	**Requirements**	**Typical Results**
Hardness, (Shore A) (ASTM D2280)	80±5	82
Tensile Strength, psi(MPa) (ASTM D412)	2321(16)(min)	3180(21.9)
Elongation, (%) (ASTM D412)	175(min)	210
Modulus at 100%, psi(MPa) (ASTM D412)		1483(10.22)
(B16) Heat age, 70 Hrs @ 150 ℃ (ASTM D865)		
Hardness Change, pts.	+10(max)	+7
Tensile Strength Change, %	-25(max)	+4
Elongation Change, %	-30(max)	-27
(EO16) ASTM #1 Oil, 70 Hrs @ 150℃ (ASTM D471)		
Hardness Change, pts.	-5~+10	+2
Tensile Strength Change, %	-20(max)	+5
Elongation Change, %	-30(max)	-16
Volume Change, %	±5	-4
(EO36) IRM 903 Oil, 70 Hrs @ 150 ℃ (ASTM D471)		
Hardness Change, pts.	+15(max)	-9
Tensile Strength Change, %	-30(max)	-7
Elongation Change, %	-30(max)	-7
Volume Change, %	+25(max)	+14
(Z1) Compression Set (% Set), 22 Hrs. @ 150°C (ASTM D395B)		
	+30(max)	+16

Compound Previously Known As: HNBR80CD

Report Date: 9/14/2020