

KC Seals Inc.

MATERIAL SPECIFICATION INFORMATION

COMPOUND: MCM3008

DATE: 3/2021

SCOPE: 80 DURO HNBR COMPOUND. HNBR WITH SERVICE RANGE OF (-6.7°C) TO (162.7°C) EXPOSURE TO LOW TEMPERATURE / CRUDE OIL / H2S UP TO 5% & OTHER OIL WELL FLUIDS

MATERIAL REQUIREMENTS

Compound shall be capable of meeting the requirements listed below. All testing is performed per the ASTM specifications listed below unless otherwise noted.

PHYSICAL PROPERTIES	ASTM TEST METHOD	REQUIREMENT
ORIGINAL PROPERTIES		
HARDNESS	D2240 SHORE A DUROMETER	75-85
TENSILE STRENGTH	D412 METHOD A	3900 PSI
ELONGATION	D412 METHOD A	210%
MODULUS AT 100% ELONGATION	D412 METHOD A	1270 PSI
TEAR STRENGTH DIE C	D412 METHOD A	
SPECIFIC GRAVITY		1.18 - 1.24
HEAT AGING (70 HOURS @ 125 °C) D865		
HARDNESS	D2240 SHORE A DUROMETER	10 PTS
TENSILE STRENGTH	D412 METHOD A	20%
ELONGATION	D412 METHOD A	30%
COMPRESSION SET D395 METHOD B		
22 HOURS @ 100°C	D395 METHOD B	15%
FLUID IMMERSION /IRM903 OIL D471		
70 HOURS @ 100°C	D412 METHOD A	
HARDNESS	D412 METHOD A	- 10
TENSILE STRENGTH	D412 METHOD A	35 %
ELONGATION	D412 METHOD A	35 %
VOLUME SWELL		22 %