



**MATERIAL** HNBR 75 Shore Black

**DESCRIPTION** HNBR (Hydrogenated Acrylonitrile-Butadiene-Rubber)  
ACN content is 34%, hydrogenation is 99.5%  
Cure system is peroxide

**APPLICATION** This material has excellent resistance to aliphatic hydrocarbons (eg. propane, butane, and petroleum), mineral oils/greases, vegetable/animal oils/greases, heating oil and diesel fuel. Due to hydrogenation of the double bond in the butadiene and the peroxide cure system, higher service temperature and abrasion resistance properties are achieved.

**TEMPERATURE** Low temperature service limit -22°F (-30°C)  
Upper temperature continuous service limit +302°F (+150°C)

**PRODUCTS** Extrusions (cords/profiles/tubes)  
Hot Vulcanised O rings  
Moulding (custom/O rings)

### PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES
Specific Gravity	ASTM D1817	1.24
Durometer shore A (slab)	ASTM D2240	73
Elongation % (Dumbbell)	ASTM D412	360
Tensile strength PSI (MPa) (Dumbbell)	ASTM D412	2612 (18.0)
Compression set % 22h @ 302°F (150°C) (slab)	ASTM D395B	21

#### HEAT AGEING 70h @ 302°F (150°C) ASTM D573

Durometer change points shore A	+4
Elongation change %	-4
Tensile strength change PSI (MPa)	-207 (1.43)
Weight loss grams	0.06

#### FLUID IMMERSION Oil No 3 70h @ 302°F (150°C) ASTM D471

Volume change %	+17
Durometer change points shore A	-7.4
Elongation change %	-23
Tensile strength change PSI (MPa)	+14.5 (+1)

#### Information

The above information corresponds to our current knowledge and is offered solely to provide possible suggestions for your own experimentations. It is not intended to substitute any testing you may need to conduct to determine suitability of our products for your end use. Northern Engineering reserves the right to revise this information as new knowledge and experience becomes available. Northern Engineering makes no warranties and assumes no liability in connection with any use of the above information.