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Material Data Sheet	Code	N70L	Issue 2 Revision 3
	Designation	NBR	May 2001

MATERIAL TYPE: Nitrile Butadiene Rubber (NBR), 70 IRHD.

Low- Med acrylonitrile (ACN) content. Copolymer of acrylonitrile and butadiene.

To meet: ASTM D2000/SAE J200 line call-out: M5BG710, A14, B14, EO14, EO34, F17.

APPLICATION: The low acrylonitrile content of this compound provides excellent low temperature flexibility, in sealing conditions where resistance to mineral oil, alcohol, paraffin and low-aromatic petrol is required. Not recommended for use with acetone, benzene, chlorinated solvents or high-aromatic petrol. Good water resistance but poor against ozone and weather.

TEMPERATURE RANGE: Maximum temperature: +120 deg C (+248 deg F)

Minimum temperature -40 deg C (-40 deg F)

SHELF LIFE CLASSIFICATION:

BS3574 = Group 'B' rubber, initial storage = 7 years, extended storage = 3 years. * * The periods quoted are dependent upon strict compliance to the relevant standard.

TYPICAL PHYSICAL PROPERTIES:					
Hardness (IRHD)	70 ± 5	Compression Set, after;			
Tensile strength (MPa)	10.0 min.	22 hours at 100°C (%)	25 max.		
Elongation at break (%)	250 min.				
Heat Resistance, 70 hours at 100°C (Air);		Low Temperature Resistance;			
Hardness change (points)	±15 max.	Non-brittle after 3 minutes at	-40°C		
Tensile strength change (%)	-20 max				
Elongation at break change (%)	-40 max.				
Fluid Resistance, 70 hours at 100°C.	ASTM Oil 1	ASTM Oil 3 (IRM903)			
Hardness change (points) -5 to +15 max.		0 to –15max.			
Tensile strength change (%)	-25 max.	-45 max.			
Elongation at break change (%)	-45 max.	-45 max.			
Volume change (%)	-10 to +5 max.	0 to +35 max.			

COSHH HEALTH AND SAFETY DATA: No known hazard exists, if used in accordance with the temperature range as quoted.

FIRE HAZARD: Ignition temperature >300°C.

Thermal decomposition will generate carbon dioxide, carbon monoxide, hydrocarbons, nitrogen compounds and hydrogen cyanide. In the event of a fire, fire-fighters must wear self-contained breathing apparatus and protective clothing. Extinguish with water, foam, carbon dioxide or dry chemical.

DISPOSAL: Must conform to national, state and/or local regulations. Land-fill is recommended. Burning is not recommended, unless undertaken by an approved/licensed incineration agency.

SPECIAL NOTE: This information is to the best of our knowledge, accurate to the date indicated. However, PPE make 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, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life, therefore a regular program of inspection and replacement is strongly recommended.

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