

# Material Data Sheet

## NITRILE

### NITRILE 70R

### NBR70-SLS2



Compound Number: NBR70-SLS2

(COMPLIANT TO FDA REGULATION CFR 21 177-2600)

**COLOUR:** BLACK

**GENERAL SERVICE TEMPERATURE RANGE:** -35°C to 110°C

**SPECIFICATION:** ASTM D2000 M2BG714 A14 B14 EA14 EO14 EO34 EF11 EF21 F17

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULT 69
HARDNESS, SHORE A	70+/-5	14.1
TENSILE STRENGTH, MPa	14	431
ELONGATION, %	250	1.221
SPECIFIC GRAVITY		
<b>HEAT RESISTANCE 70 hrs @100°C</b>		
HARDNESS CHANGE, POINTS	+/-15	+5
TENSILE STRENGTH CHANGE, %	+/-30	+2
ELONGATION CHANGE, %	-50	-11
<b>COMPRESSION SET</b>		
22 hrs @ 100°C, %	25	7
<b>FLUID RESISTANCE, ASTM NO.1 OIL 70 hrs @100°C</b>		
HARDNESS CHANGE, POINTS	- 5~+10	+2
TENSILE STRENGTH CHANGE, %	-25	+9
ELONGATION CHANGE, % VOLUME CHANGE, %	-45	-15
	-10~+5	-3
<b>FLUID RESISTANCE, ASTM IRM 903 OIL 70 hrs @100°C</b>		
HARDNESS CHANGE, POINTS	-10~-+5	-10
TENSILE STRENGTH CHANGE, %	-45	-19
ELONGATION CHANGE, %	-45	-22
VOLUME CHANGE, %	0~+25	+17
<b>WATER RESISTANCE, 70 hrs @100°C</b>		
HARDNESS CHANGE, POINTS	+/-10	-6
VOLUME CHANGE, %	+/-15	+15
<b>FLUID RESISTANCE, FUEL A 70 hrs @ 23°C</b>		
HARDNESS CHANGE, POINTS	+/-10	-2
TENSILE STRENGTH CHANGE, %	-25	-11
ELONGATION CHANGE, %	-25	-4
VOLUME CHANGE, %	-5~+10	+3
<b>FLUID RESISTANCE, FUEL B 70 hrs @ 23°C</b>		
HARDNESS CHANGE, POINTS	0~-30	-1
TENSILE STRENGTH CHANGE, %	-60	-12
ELONGATION CHANGE, %	-60 0~	-4
VOLUME CHANGE, %	+40	+3
<b>LOW TEMPERATURE BRITTLENESS TESTS</b>		
AFTER 3MIN AT -40°C		NON BRITTLE

The above test results are based on test slabs / buttons. The results from the actual parts may be different.