

N1000 is formulated to provide value with balance cost and performance. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

ABOUT #N1000

N1000 is a general use Neoprene material. Neoprene was the first synthetic rubber developed commercially and exhibits generally good ozone, aging and chemical resistance. Neoprene rubbers contain Chlorine in the polymer to reduce the reactivity to many oxidizing agents, as well as to oil and flame. Neoprene have good abrasion and tear resistance.

FEATURES

- Low cost.
- Paraffin base mineral oil with low DPI, e.g. ASTM oil No. 1
- Silicone oil and grease
- Water and water solvents at low temperatures
- Refrigerants
- Ammonia
- Carbon dioxide
- Improved ozone, weathering and aging resistance compared with nitrile rubber.

APPLICATION EXAMPLES

- HVAC applications
- Refrigeration applications
- Dynamic applications

ADDITIONAL INFORMATION

- Service Temperature of -40° to 250°F
- Spec: ASTM D2000 M3BC710 A14 B14 E014 E034

This information is accurate and reliable to the best of our knowledge. However, Marco Rubber makes 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.

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, per ASTM D2240	70 +/- 5	68
Color	Black	Black
Tensile Strength, MPa (psi), per ASTM D412	1,440 min.	1700
Ultimate Elongation, %, per ASTM D412	250 min.	260
HEAT RESISTANCE – A14, ASTM D 573 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, per ASTM D2240	15	8
Tensile Strength Change, %, per ASTM D412	-15	-10
Ultimate Elongation Change, %, per ASTM D412	-40 max.	-29
COMPRESSION SET – B14, ASTM D 325 Method B (22 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	35 max.	14
FLUID RESISTANCE –ASTM #1 Oil – E014, ASTM D 471 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, per ASTM D2240	+/- 10	-8
Tensile Strength Change, %, per ASTM D412	-30 max.	-12
Ultimate Elongation Change, %, per ASTM D412	-30 max.	-15
Volume Change, %, per ASTM D412	-10 to +15	+4
FLUID RESISTANCE – IRM 903 Oil, -E034, ASTM D 471 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Tensile Strength Change, %, per ASTM D2240	-60 max.	-52
Ultimate Elongation Change, %, per ASTM D412	-50 max.	-30
Volume Change, %, per ASTM D412	+100 max.	+49