Compound Data Sheet
Parker O-Ring Division United States

MATERIAL REPORT

DATE: 5-3-2000

TITLE: Evaluation of Parker Compound C1278-80.

PURPOSE: To obtain general data.

CONCLUSION: Parker Compound C1278-80 provides resistance to a broad range of refrigerants and lubricants, while performing in a broader temperature range than existing Neoprene formulations.

Recommended temperature limits: -35°F to 250°F

Recommended For
Carbon Dioxide
Ammonia
Refrigerants
Silicone oil and grease
Water and water solvents at low temperatures

Not Recommended For
Aromatic hydrocarbons, e.g, benzene
Chlorinated hydrocarbons
Polar solvents, e.g. ketones, esters, ethers, acetones

Parker O-Ring Division
2360 Palumbo Drive
Lexington, Kentucky 40509
(859) 269-2351

Compound Data Sheet
Parker O-Ring Division United States

REPORT DATA

	C1278-80 2-214Test Results
Basic Physical Properties	
Hardness	81
Tensile Strength, psi.	1604
Elongation, %	239
Compression Set, 70 H @ 257 °F, 2-214 O-Rings	
% Max. Deflection	35.1
Heat Aging, 70 H @ 257 °F	
Hardness Change, pts	+6
Tensile Change, %	+5
Elongation Change, %	-16
Fluid Immersion, ASTM #1 Oil, 70 H @ 257 °F	
Hardness Change, pts.	-2
Tensile Change, %, max	+8
Elongation Change, % max.	+6
Volume Change, % max.	+3.4
Fluid Immersion, PAG Refrigerant Oil, 70 H @ 257 °F	
Hardness Change, pts.	-1
Tensile Change, %, max	-10
Elongation Change, % max.	-8
Volume Change, % max.	+4.2
Fluid Immersion, R134A, 70H @ RT	
Volume Change, % max.	+0.6
Glass Transition Temperature by DSC, 20°C/ min heat rate	
T(g) by DSC, °C	-42.0
Volume Change in Refrigerants and Refrigerant Lubricants	
R22/3GS oil, 50/50, 70H @ 125°C	+35.9
R12/3GS oil, 50/50, 70H @125°C	+24.3
R22, 70H @125°C	+3.3
R12, 70H @125°C	+1.9
R123, 70H @ 100°C	+18.8
R123/Mineral Oil, 50/50, 70H @ 100°C	+25.5
R134A, 70H @100°C	+2.4
PAG oil, 70H @ 100°C	+5.1
R134A/PAG oil, 50/50, 70H @100°C	+3.4
R22, 70H @ 100°C	+6.6
Mobil Arctic 22A oil, 70H @ 100°C	+34.9
R22/Mobil Arctic 22A, 50/50, 70 H @ 100 °C	+6.8

Parker O-Ring Division
2360 Palumbo Drive
Lexington, Kentucky 40509
(859) 269-2351