



Overview

Canrez® CP90BK01 is Canyon's flagship AED FFKM offering near universal chemical resistance and excellent high-temperature resistance at a low cost. Compare it to Kalrez 7090, 3018, and 7075.

CP90BK01 is AED tested to NACE TM0297 & NORSOK M-710 and is an excellent choice for demanding Oil and Gas applications.

Features & Benefits

- NACE TM0297 & NORSOK M-710
- Near universal chemical resistance
- High Temperature Resistance
- Low Compression Set
- Cost Effective

Recommended Applications

- Oil & Gas
- Chemical Processing
- Aerospace

Service Temperature

- -15°C to 310°C (5°F to 590°F)
- Steam < 150°C (300°F)
- Amines < 71°C (160°F)



Test Data

Table 1. Physical Properties

Color	Black
Hardness, Shore A	90
Tensile Strength, psi (MPa)	3161 (21.8)
Elongation	120%
Specific Gravity, g/cm ³	1.97
Tear Strength, N/mm	27.1

Table 2. Compression Set

70hrs at 200°C	28%
70hrs at 250°C	39%
336hrs at 200°C	30%

Table 3. Heat Aging – 70 hrs at 300°C

Hardness, Shore A	+2
Tensile Strength Change, %	-8
Ultimate Elongation Change, %	+15
Weight Loss, %	-1

Table 4. Steam Resistance – 168 hrs at 200°C

Hardness, Shore A	-3
Tensile Strength Change, %	+11
Ultimate Elongation Change, %	-17
Volume Change, %	+3.1





Chemical Compatibility

Table 5. HCL, 37% – 72 hrs at 80°C

Hardness, Shore A	-1
Tensile Strength Change, %	-4
Ultimate Elongation Change, %	-15
Volume Change, %	+1.6

Table 6. HF, 49% – 720 hrs at 23°C

Hardness, Shore A	+0
Tensile Strength Change, %	+5
Ultimate Elongation Change, %	-23
Volume Change, %	+0.3

Table 7. Nitric Acid, 65% – 168 hrs at 80°C

Hardness, Shore A	-10
Tensile Strength Change, %	-30
Ultimate Elongation Change, %	+5
Volume Change, %	+10

Table 8. KOH, 50% – 168 hrs at 125°C

Hardness, Shore A	-2
Tensile Strength Change, %	-10
Ultimate Elongation Change, %	-15
Volume Change, %	+0.4

Table 9. Ethylene Diamine – 336 hrs at 60°C

Hardness, Shore A	-8
Tensile Strength Change, %	-10
Ultimate Elongation Change, %	-13
Volume Change, %	+20

Table 10. MDEA – 168 hrs at 100°C

Hardness, Shore A	-2
Tensile Strength Change, %	+2
Ultimate Elongation Change, %	+0
Volume Change, %	+4.6

Table 11. NH₃, 28% – 168 hrs at 100°C

Hardness, Shore A	-7
Tensile Strength Change, %	-15
Ultimate Elongation Change, %	-18
Volume Change, %	+15

Looking for specific chemical compatibilities or desire more material information? [Please Contact Us!](#)

Anti-Explosive Decompression

Table 12. NACE TM0297

Test Gas	100 % CO ₂
Test Temperature, °C	150
Test Pressure, bar	380
Test Decompression Rate, bar/min	70
NACE Test Rating	1
Results	PASS

Table 13. NORSOK M-710

Test Gas	90/10 mol % CH ₄ /CO ₂
Test Temperature, °C	100
Test Pressure, bar	150
Test Decompression Rate, bar/min	20.5
NORSOK Test Rating	0000
Results	PASS