



Overview

CanRez® CP75BK33 is an 75A FFKM designed for semiconductor wet processing and offering best-in-class chemical resistance. It has excellent resistance to hot amines, steam, sour gas, strong acids and solvents.

Compare CP75BK33 to Kalrez 6375UP and Chemraz 550.

Features & Benefits

- Near-Universal Chemical Resistance
- Broad Wet-Process Compatibility
- Hot Amine & H₂S Resistance
- Steam & High Temperature Resistance
- Low Compression Set
- Longer Seal Life, Less Downtime

Recommended Applications

- Semiconductor Wet Processing
- Wafer Cleaning & Etching
- Developing & Resist Stripping
- Post-Etch & Post-CMP Cleaning
- Acids, Alkalis, Oxidizers & Solvents
- Chemical Processing
- Oil & Gas, Sour Gas & Amines

Service Temperature

- -15°C to 260°C (5°F to 500°F)
- Steam < 225°C (437°F)
- Amines < 200°C (400°F)



Test Data

Table 1. Physical Properties

Color	Black
Hardness, Shore A	77
Tensile Strength, psi (MPa)	2697 (18.6)
Elongation	150%
Modulus at 100%, psi (MPa)	1479 (10.2)
Modulus at 50%, psi (MPa)	304 (2.1)
Specific Gravity, g/cm ³	2
Fluorine Percentage	72.7%
TR10, °C	-4

Table 2. Compression Set

70hrs at 200°C, %	18.1
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Table 3. Heat Aging – 70 hrs at 250°C

Hardness, Shore A	-2
Tensile Strength Change, %	-11
Ultimate Elongation Change, %	+20
Volume Change, %	+0





Wet Clean / Etch Chemistries

Table 4. SC-1: NH₄OH 29% / H₂O₂ 30% / H₂O, (1:1:5) – 720 hrs at 23°C

Hardness, Shore A	-1
Volume Change, %	+0.4

Table 5. SC-2, HCl 37% / H₂O₂ 30% / H₂O, (1:1:6) – 720 hrs at 23°C

Hardness, Shore A	+2
Volume Change, %	-0.2

Table 6. Potassium Hydroxide (KOH) 50% – 168 hrs at 125°C

Hardness, Shore A	-1
Volume Change, %	+0

Table 7. Hydrofluoric Acid (HF) 49% – 720 hrs at 23°C

Hardness, Shore A	+0
Volume Change, %	+2.2

Table 8. Piranha / SPM: H₂SO₄ 96% / H₂O₂ 30%, 5:1 – 720 hrs at 23°C

Hardness, Shore A	-6
Volume Change, %	+2

Table 9. HNO₃ 65% / HF 49% / H₂O, (41:13:46) – 720 hrs at 50°C

Hardness, Shore A	+0
Volume Change, %	+1.4

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

High Temp Steam & Water

Table 10. Steam – 168 hrs at 200°C

Hardness, Shore A	-5
Tensile Strength Change, %	-17
Ultimate Elongation Change, %	+42
Volume Change, %	+2

Table 11. Steam – 672 hrs at 200°C

Hardness, Shore A	-6
Tensile Strength Change, %	-20
Ultimate Elongation Change, %	+42
Volume Change, %	+2

Table 12. Water – 672 hrs at 200°C

Hardness, Shore A	-4
Tensile Strength Change, %	+0
Ultimate Elongation Change, %	+13
Volume Change, %	+5

Chemical Compatibility

Table 13. N-Methyldiethanolamine (MDEA) – 168 hrs at 150°C

Hardness, Shore A	-1
Tensile Strength Change, %	-24
Ultimate Elongation Change, %	+0
Volume Change, %	+4

Table 14. Dipropylamine – 168 hrs at 200°C

Hardness, Shore A	-6
Tensile Strength Change, %	-29
Ultimate Elongation Change, %	-8
Volume Change, %	+5



**Table 15. Monoethanolamine (MEA)
– 168 hrs at 168°C**

Hardness, Shore A	-3
Volume Change, %	+0.1

**Table 16. Hydroxylamine (NH₂OH) 50%
– 168 hrs at 168°C**

Hardness, Shore A	-2
Volume Change, %	-0.6

**Table 17. Diglycolamine (DGA)
– 168 hrs at 168°C**

Hardness, Shore A	-1
Volume Change, %	+0

**Table 18. N-Methyl-2-pyrrolidone
(NMP) – 168 hrs at 168°C**

Hardness, Shore A	-3
Volume Change, %	+1

**Table 19. N,N-Dimethylacetamide
(DMAc) – 168 hrs at 168°C**

Hardness, Shore A	+0
Volume Change, %	+0.4

**Table 20. Tetramethylammonium
Hydroxide (TMAH) 25% – 168 hrs at
168°C**

Hardness, Shore A	-1
Volume Change, %	+0.8

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**Table 21. Ethanolamine – 72 hrs at
150°C**

Hardness, Shore A	-32
Tensile Strength Change, %	10
Ultimate Elongation Change, %	-10
Volume Change, %	19

**Table 22. Glacial Acetic Acid – 336 hrs
at 100°C**

Hardness, Shore A	-5
Tensile Strength Change, %	-14
Ultimate Elongation Change, %	-16
Volume Change, %	+8

**Table 23. Sulfuric Acid, 98% – 672 hrs
at 180°C**

Hardness, Shore A	-12
Tensile Strength Change, %	-42
Ultimate Elongation Change, %	-28
Volume Change, %	+7

**Table 24. Nitric Acid, 65% – 672 hrs at
110°C**

Hardness, Shore A	+4
Tensile Strength Change, %	-42
Ultimate Elongation Change, %	-6
Volume Change, %	-2