

## Overview

Canrez® CP70TA11 is Canyon's specialty translucent amber FFKM developed specifically for semiconductor manufacturing environments, plasma & laser applications, & high purity medical applications. Compare it to Kalrez 9100, 8085, and 6375.

## Features & Benefits

- Ultra-high purity
- Low etch rate & low particle generation
- Near universal chemical resistance
- High resistance to plasma

## Recommended Applications

- Semiconductor Dry & Wet
  - Ashing, etching, polishing, PVD, deposition, PECVD, LPCVD, SACVD, CVD, RPCVD, HDPCVD, APCVD, RTP, wafer cleaning, lamp anneal, metal & SiO<sub>2</sub> etching, CMP, Oxidation, litho, EPI +SiGe
- Medical, laser, & plasma applications

## Service Temperature

- -15°C to 280°C (5°F to 536F)



## Test Data

Table 1. Physical Properties

Color	Translucent Amber
Hardness, Shore A	71
Tensile Strength, psi (MPa)	2712 (18.7)
Elongation	260%
100% Modulus, psi (MPa)	696 (4.8)
Specific Gravity, g/cm <sup>3</sup>	2.08
TR10, °C	1
Brittleness, 100% Pass, °C	-19
Brittleness, 50% Pass, °C	-24

Table 2. Compression Set

70hrs at 200°C	23%
70hrs at 300°C	57%

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

## Chemical Compatibility

Table 3. 50% KOH – 168 hrs at 125°C

Hardness, Shore A	-2
Tensile Strength Change, %	-7
Ultimate Elongation Change, %	-21
Volume Change, %	+0.3



**Table 4. 65% HNO<sub>3</sub> / 49% HF / H<sub>2</sub>O  
41/13/46 – 720 hrs at 50°C**

Hardness, Shore A	+1
Tensile Strength Change, %	0
Ultimate Elongation Change, %	-31
Volume Change, %	-0.6

**Table 5. 49% HF – 720 hrs at 23°C**

Hardness, Shore A	0
Tensile Strength Change, %	+5
Ultimate Elongation Change, %	-26
Volume Change, %	-0.5

**Table 6. 29% NH<sub>4</sub>OH / 30% H<sub>2</sub>O<sub>2</sub> / H<sub>2</sub>O  
1:1:5 (SC1) – 720 hrs at 23°C**

Hardness, Shore A	+2
Tensile Strength Change, %	+22
Ultimate Elongation Change, %	-22
Volume Change, %	0

**Table 7. 37% HCL / 30% H<sub>2</sub>O<sub>2</sub> / H<sub>2</sub>O 1:1:6  
(SC2) – 720 hrs at 23°C**

Hardness, Shore A	+2
Tensile Strength Change, %	+8
Ultimate Elongation Change, %	-18
Volume Change, %	-0.3

**Table 8. 96% H<sub>2</sub>SO<sub>4</sub> / 30% H<sub>2</sub>O<sub>2</sub> 5:1  
(Piranha Fluid) – 720 hrs at 23°C**

Hardness, Shore A	+1
Tensile Strength Change, %	-5
Ultimate Elongation Change, %	-26
Volume Change, %	0