



## Overview

AF70BK00 is Canyon's standard 70 shore A durometer, black AFLAS® TFE/P. This is a very popular, cost-effective commodity material. Great performance in steam-in-place (SIP) applications.

## Features & Benefits

- High temperature resistance
- Low compression set
- High steam resistance up to 200°C
- Excellent resistance to amines, acids, and bases
- Up to 200 MRad of gamma ray resistance

## Service Temperature

- -10°C to 232°C (15°F to 450F)

## Specification

- ASTM D 2000 M2HK714 A1-10 B37 EF31

## Test Data

**Table 1. Physical Properties**

| Test                                | Requirements    | Results     |
|-------------------------------------|-----------------|-------------|
| Color                               | Black           | Black       |
| Hardness, Shore A                   | 70+/-5          | 74          |
| Tensile Strength, psi (MPa)         | 2016 min (13.9) | 2611 (18.0) |
| Elongation                          | 175% min        | 265%        |
| Specific Gravity, g/cm <sup>3</sup> |                 | 1.85        |

General Purpose



**Table 2. A1-10 - Heat Aging - 70 hrs at 250°C**

| Test (Change)       | Requirements | Results |
|---------------------|--------------|---------|
| Hardness, Shore A   | +10 max      | +1      |
| Tensile Strength, % | -25 max      | -2      |
| Elongation, %       | -25 max      | -5      |

**Table 3. B37 - Compression Set - 24 hrs at 230°C**

| Test (Change)    | Requirements | Results |
|------------------|--------------|---------|
| Permanent Set, % | 50 max       | 10      |

**Table 4. EF31 - Fuel C Resistance - 70 hrs at 23°C**

| Test (Change)       | Requirements | Results |
|---------------------|--------------|---------|
| Hardness, Shore A   | -5 to +5     | -3      |
| Tensile Strength, % | -25 max      | -7      |
| Elongation, %       | -20 max      | -10     |
| Volume, %           | 0 to +10     | +6      |

**Table 5. AS1241 Type IV Fluid Resistance - 70 hrs at 100°C**

| Test (Change)       | Requirements | Results |
|---------------------|--------------|---------|
| Hardness, Shore A   | -20 max      | -8      |
| Tensile Strength, % | -40 max      | -32     |
| Elongation, %       | -20 max      | 0       |
| Volume, %           | 0 to +30     | +25     |