# Typical Properties of Cured Compound
# Compound N-7079
# 70 Durometer Nitrile Rubber - UL Recognized, Category JMLU2*

| Original Physical Properties | Requirements | Results |
|---|---|---|
| Hardness, Shore A durometer points | | 74 |
| Tensile Strength, psi | | 1599 |
| Elongation, % | | 294 |
| Modulus at 100%,psi | | 1641 |
| Specific Gravity (g/cm³) | | 1.34 |
| | | |
| **Heat Resistance: 70 hr @ 100˚C** | | |
| Hardness Change, max durometer points | +/- 10 | +3 |
| Tensile Change, % | -40 (max) | +11 |
| Elongation Change, % | -40 (max) | -23 |
| Hand Flex Test | no deterioration | pass |
| | | |
| **Heat Resistance: 168 hr @ 70˚C** | | |
| Tensile Change, % | -25 (max) | +4 |
| Elongation Change, % | -40 (max) | -9 |
| Hand Flex Test | no deterioration | pass |
| | | |
| **Fluid Resistance: ASTM Reference Fuel A, 70 hr @ 23˚C** | | |
| Tensile Change, % | -40 (max) | -1 |
| Elongation Change, % | -40 (max) | -4 |
| Change in weight, % | 10% (max) | -0.8 |
| Change in volume, % | -1 to +25 | -0.8 |
| | | |
| **Fluid Resistance: ASTM Reference Fuel C, 70 hr @ 23˚C** | | |
| Tensile Change, % | -40 (max) | -19 |
| Elongation Change, % | -40 (max) | -31 |
| Change in weight, % | 10% (max) | -1.6 |
| Change in volume, % | -1 to +40 | +21.9 |
| | | |
| **Fluid Resistance: 85%Ref Fuel C/15% Ethanol, 70 hr @ 23˚C** | | |
| Tensile Change, % | -40 (max) | -28 |
| Elongation Change, % | -40 (max) | -37 |
| Change in weight, % | 10% (max) | -4.4 |
| Change in volume, % | -1 to +40 | +30.6 |

| | Requirements | Results |
|---|---|---|
| **Fluid Resistance: UL CE25a, 1000 hr @ 23˚C** | | |
| Tensile Change, % | -40 (max) | -38 |
| Elongation Change, % | -40 (max) | -26 |
| Change in weight, % | 10% (max) | -4.8 |
| Change in volume, % | -1 to +40 | +29.1 |
| | | |
| **Fluid Resistance: UL CE85a, 1000 hr @ 23˚C** | | |
| Tensile Change, % | -40 (max) | -15 |
| Elongation Change, % | -40 (max) | -21 |
| Change in weight, % | 10% (max) | -6.6 |
| Change in volume, % | -1 to +40 | +5 |
| | | |
| **Fluid Resistance: Kerosene (Type K Deodorized), 70 hr @ 23˚C** | | |
| Tensile Change, % | -40 (max) | -1 |
| Elongation Change, % | -40 (max) | -6 |
| Change in volume, % | -1 to +25 | +2.1 |
| | | |
| **Fluid Resistance: IRM 903 Oil, 70 hr @ 23˚C** | | |
| Tensile Change, % | -40 (max) | +2 |
| Elongation Change, % | -40 (max) | +3 |
| Change in volume, % | -1 to +25 | -0.6 |
| | | |
| **Fluid Resistance: n-Hexane, 70 hr @ 23˚C** | | |
| Tensile Change, % | -40 (max) | -6 |
| Elongation Change, % | -40 (max) | -9 |
| Change in weight, % | 10% (max) | -0.7 |
| Change in volume, % | -1 to +25 | +0.6 |
| | | |
| **Compression Set: 22 hr @ 70˚C** | | |
| Compression Set, % | n/a | 8.8 |
| | | |
| **Tensile Set: 100% Elongation @ 23˚C** | | |
| Tensile Set, % | 25% (max) | 1.3 |
| | | |
| **Low Temperature Resistance, 24 hr @ -35˚C** | no cracks | pass |
| | | |

***Recognized End Use Applications per UL157, UL50/50E, UL87A, UL87B, UL87C, UL 2586A, UL 2586B**

- Gasoline
- Gasoline/Alcohol blends up to 15% alcohol (ethanol)
- Naphtha or kerosene
- Manufactured gas or natural gas
- Diesel fuel, fuel oil or lubricating oil
- Liquefied petroleum (LP) gas
- Suitable for use in UL 50 “Enclosures for Electrical Equipment”, (including oil immersion) gasket applications
- Suitable for use in UL 50E (periodic recompression) “Enclosures for Electrical Equipment, Environmental Considerations”, (including oil immersion) gasket applications
- Suitable for use with gasoline/ethanol blends having an ethanol content up to 85% (E85) for static applications
- Suitable for use with gasoline/ethanol blends having an ethanol content up to 25% (E25) for static applications
- Suitable for use with gasoline/ethanol blends having an ethanol content up to 85% (E85) for dynamic applications
- Suitable for use with gasoline/ethanol blends having an ethanol content up to 25% (E25) for dynamic applications

*The data shown here are provided as an engineering guide only, and should not be used for the purpose of establishing performance limits. These values were obtained using established standard test procedures, and are believed to be reliable. However, due to the variables that may be encountered in actual use, it is always advisable to test the material under actual service conditions before specification.*