



Compound

3772**NITRILE BUTADIENE
70 DUROMETER
BLACK COLOR****PRODUCT DATA SHEET**

Compound 3772 is a 70 durometer black colored Buna N elastomer. It exhibits good resistance to heat, compression set, petroleum based oils and fuels.

This compound will meet or exceed the specifications listed and has the following physical properties:

ASTM D2000 2 BF 720 B14 B34 EO14 EO34
2 BG 720 B14 B34 EO14 EO34 EF11 EF21 EA14
3 BG 720 B14 EO14
4 BG 720 B14 EO14 EO34
5 BG 720 A14 B14 B34 EO14 EO34
4 BK 720 A24 B14 B34 EO14 EO34 EF11 EF21
2 CH 720 A25 B14 B34 EO15 EO35 EF31
3 CH 720 A25 B14 B34 EO16 EO36
5 CH 720 A25 B14 B34 EO36 F14
6 CH 720 B14 B34 EO36

AMS 7272

Original Properties

| | | |
|---------------------------|---------------|----------|
| Modulus @ 100% Elongation | 543 psi | 3.7 MPa |
| Tensile Strength | 2420 psi | 16.7 MPa |
| Ultimate Elongation | 350 % | |
| Hardness, Shore A | 70 Durometer | |
| Specific Gravity | 1.24 grams/cc | |
| Brittleness Temperature | -17 °F | -27 °C |
| Tear Resistance, Die B | 0 ppi | 0.0 kN/m |

Compression Set

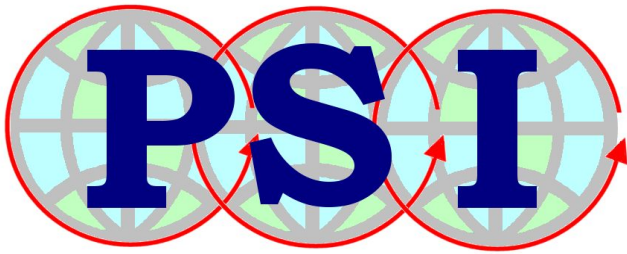
| | |
|-------------------------------|--------|
| Solid: 22 hrs @ 212°F (100°C) | 13.1 % |
| Plied: 22 hrs @ 212°F (100°C) | 15.7 % |

HEAT AGED: 70 hrs @ 212°F (100°C)

| | |
|----------------------------|----------|
| Change - Tensile Strength | + 9.5 % |
| Change - Elongation | - 14.3 % |
| Change - Hardness, Shore A | + 7 |

HEAT AGED: 70 hrs @ 257°F (125°C)

| | |
|----------------------------|----------|
| Change - Tensile Strength | + 12.7 % |
| Change - Elongation | - 33.3 % |
| Change - Hardness, Shore A | + 9 |



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| | |
|----------------------------|----------|
| Change - Tensile Strength | + 12.7 % |
| Change - Elongation | - 33.3 % |
| Change - Hardness, Shore A | + 9 |

DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)

| | |
|----------------------------|---------|
| Change - Hardness, Shore A | - 5 |
| Change - Volume | + 8.3 % |

ASTM REFERENCE FUEL A: 70 hrs @ RT (73°F, 23°C)

| | |
|----------------------------|---------|
| Change - Tensile Strength | - 4.5 % |
| Change - Elongation | 0.0 % |
| Change - Hardness, Shore A | 0 |
| Change - Volume | 0.0 % |

ASTM REFERENCE FUEL B: 70 hrs @ RT (73°F, 23°C)

| | |
|----------------------------|----------|
| Change - Tensile Strength | - 37.0 % |
| Change - Elongation | - 33.0 % |
| Change - Hardness, Shore A | - 15 |
| Change - Volume | + 22.5 % |

ASTM REFERENCE FUEL C: 70 hrs @ RT (73°F, 23°C)

| | |
|----------------------------|----------|
| Change - Tensile Strength | - 50.9 % |
| Change - Elongation | - 26.7 % |
| Change - Hardness, Shore A | - 21 |
| Change - Volume | + 39.2 % |

ASTM OIL #1: 70 hrs @ 212°F (100°C)

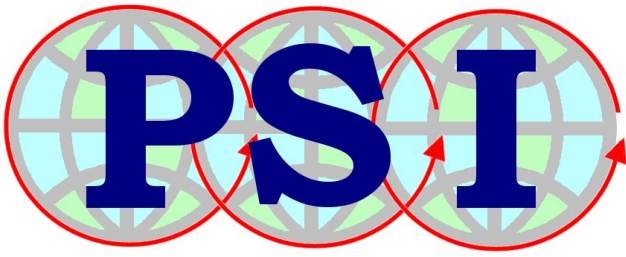
| | |
|----------------------------|---------|
| Change - Tensile Strength | + 7.2 % |
| Change - Elongation | 0.0 % |
| Change - Hardness, Shore A | + 5 |
| Change - Volume | - 3.7 % |

ASTM OIL #1: 70 hrs @ 257°F (125°C)

| | |
|----------------------------|----------|
| Change - Tensile Strength | + 10.3 % |
| Change - Elongation | - 9.9 % |
| Change - Hardness, Shore A | + 6 |
| Change - Volume | - 4.1 % |

ASTM OIL #1: 70 hrs @ 302°F (150°C)

| | |
|----------------------------|----------|
| Change - Tensile Strength | + 8.1 % |
| Change - Elongation | - 24.8 % |
| Change - Hardness, Shore A | + 8 |
| Change - Volume | - 3.6 % |



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PRODUCT DATA SHEET

ASTM OIL #3: 70 hrs @ 212°F (100°C)

| | |
|----------------------------|---------|
| Change - Tensile Strength | + 2.3 % |
| Change - Elongation | - 3.2 % |
| Change - Hardness, Shore A | - 1 |
| Change - Volume | + 4.2 % |

ASTM OIL #3: 70 hrs @ 257°F (125°C)

| | |
|----------------------------|---------|
| Change - Tensile Strength | + 5.0 % |
| Change - Elongation | 0.0 % |
| Change - Hardness, Shore A | - 2 |
| Change - Volume | + 6.1 % |

ASTM OIL #3: 70 hrs @ 302°F (150°C)

| | |
|----------------------------|----------|
| Change - Tensile Strength | - 0.2 % |
| Change - Elongation | - 14.3 % |
| Change - Hardness, Shore A | - 1 |
| Change - Volume | + 7.1 % |

Tear Resistance, Method D 624, Die B