

Test data provided by raw material manufacturer or an ISO 17025 registered 3rd party lab.  
Original test data is stored in the Darcoïd Compound Database



6/14/2022

Darcoïd Compound: 1049

## COMPOUND DATA SHEET

NBR, Black, 70±5 Shore A

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

ASTM D2000      ASTM D2000 M2BG714 A14 B14 B34 EA14 EF11 EF21 EO14 EO34 Z1

| ORIGINAL PROPERTIES        | SPEC    | RESULT | EVAL |
|----------------------------|---------|--------|------|
| Hardness, Shore A          | 70±5    | 70     | PASS |
| Tensile Strength, psi      | 2031    | 2170   | PASS |
| Ultimate Elongation, %     | 250 min | 309    | PASS |
| Modulus at 100%, psi       | --      | 616    | --   |
| Density, Mg/m <sup>3</sup> | --      | 1.25   | --   |

| HEAT AGE, 70 HR @ 100°C    | SPEC    | RESULT | EVAL |
|----------------------------|---------|--------|------|
| Hardness Change, pts       | ±15     | +2     | PASS |
| Tensile Strength Change, % | ±30     | +2     | PASS |
| Elongation Change, %       | -50 max | -21    | PASS |
| Weight Change, %           | --      | 0      | --   |

| COMPRESSION SET          | SPEC   | RESULT | EVAL |
|--------------------------|--------|--------|------|
| Solid: 22 hrs @ 100°C, % | 25 max | 14.0   | PASS |
| Plied: 22 hrs @ 100°C, % | 25 max | 22.0   | PASS |

950 3<sup>rd</sup> Street | Oakland, California 94607 | (800) 632-7264

This document is the confidential property of Darcoïd and is not to be shared with any companies or persons outside of the nondisclosure agreement without the written permission from Darcoïd.



| FLUID RESISTANCE                   | SPEC      | RESULT | EVAL |
|------------------------------------|-----------|--------|------|
| EA14 Distilled Water: 70 h @ 100°C |           |        |      |
| Hardness Change, pts               | ±10       | -3     | PASS |
| Tensile Strength Change, %         | --        | -4     | --   |
| Elongation Change, %               | --        | -8     | --   |
| Volume Change, %                   | ±15       | +7.3   | PASS |
| EF11 ASTM Fuel A, 70 h @ 23°C      |           |        |      |
| Hardness Change, pts               | ±10       | -3     | PASS |
| Tensile Strength Change, %         | -25 max   | -6     | PASS |
| Elongation Change, %               | -25 max   | -3     | PASS |
| Volume Change, %                   | -5 to +10 | +0.8   | PASS |
| EF21 ASTM Fuel B, 70 h @ 23°C      |           |        |      |
| Hardness Change, pts               | -30 to 0  | -21    | PASS |
| Tensile Strength Change, %         | -60 max   | -43    | PASS |
| Elongation Change, %               | -60 max   | -36    | PASS |
| Volume Change, %                   | 0 to +40  | +27.6  | PASS |
| EO14 IRM 901 OIL, 70 h @ 100°C     |           |        |      |
| Hardness Change, pts               | -5 to +10 | +3     | PASS |
| Tensile Strength Change, %         | -25 max   | +4     | PASS |
| Elongation Change, %               | -45 max   | -20    | PASS |
| Volume Change, %                   | -10 to +5 | -6.5   | PASS |
| EO14 IRM 903 OIL, 70 h @ 100°C     |           |        |      |
| Hardness Change, pts               | -10 to +5 | -4     | PASS |
| Tensile Strength Change, %         | -45 max   | -1     | PASS |
| Elongation Change, %               | -45 max   | -12    | PASS |
| Volume Change, %                   | 0 to +25  | +4.5   | PASS |

| Z1 Low Temperature Retraction (TR Test)      | SPEC | RESULT | EVAL |
|--|------|--------|------|
| Testing Elongation: 50%                      |      |        |      |
| Temperature Measurement Device: Thermocouple |      |        |      |
| Length of Sample: 51mm                       |      |        |      |
| Rate of temp. increasing: 1°C/min            |      |        |      |
| Test Temperature: 26°C                       |      |        |      |
| Coolant: Methanol                            |      |        |      |
| TR-10, °C                                    | -28  | -28    | PASS |

950 3<sup>rd</sup> Street | Oakland, California 94607 | (800) 632-7264

This document is the confidential property of Darcoid and is not to be shared with any companies or persons outside of the nondisclosure agreement without the written permission from Darcoid.

