

TECHNICAL DATA SHEET

EPDM COMPOUND HARDNESS 50 SHORE A

EPDM compound that has hardness of 50 shore A with good quality properties such as tensile strength, and also good heat resistance and compression set properties and besides, it can good flow in mold. For molding process, this compound can be molded good processability for compression and injection processes.

Application : Hose, Grommet, Tube, Anti-Vibration, Damper, Mounting Rubber, Rubber Pad

Compound properties

| Test item | Unit | Test Method | Result |
|--|-------------------------|-----------------------------|--------------------------------|
| <u>Compound A</u> | | | |
| Mooney viscosity (ML 1+4 @ 100°C) | - | ASTM D 1646 | 37.12 |
| Specific gravity (A) | g/cm ³ | ASTM D 297 | 1.149 |
| Dispersion | - | - | Pass |
| <u>Compound B</u> | | | |
| Specific gravity (Cure) | g/cm ³ | ASTM D 297 | 1.151 |
| <u>Cure rheograph</u> | | ASTM D 5289 | |
| ML | lbf.in | | 3.21 |
| MH | lbf.in | | 12.46 |
| Ts2 | min.sec | | 1.58 |
| T90 | min.sec | | 4.03 |
| <u>Original properties</u> | | | |
| Hardness | Shore A | ASTM D2240A | 55 |
| Tensile strength | kgf/cm ² | ASTM D 412 | 154.4 |
| Elongation at break | % | ASTM D 412 | 574.77 |
| Modulus 100% | kgf/cm ² | ASTM D 412 | 18.35 |
| Modulus 300% | kgf/cm ² | ASTM D 412 | 66.88 |
| Tear strength | kgf/cm | ASTM D 624 | 51.81 |
| <u>Compression set</u> | | ASTM D 395 | |
| 70°C x 70 hrs | % | | 35.99 |
| 100°C x 70 hrs | % | | 60.52 |
| 125°C x 70 hrs | % | | 70.65 |
| 150°C x 70 hrs | % | | 74.21 |
| <u>Ozone resistance</u> | | ASTM D 1149 | |
| (50 pphm, 40°C, 20%el, 72 hrs) | - | | No crack |
| <u>Heat aging resistance properties *</u> | | | |
| | Hardness change (point) | Tensile strength change (%) | Elongation at break change (%) |
| 70°C x 70 hrs | +2 | -5.78 | -14.28 |
| 100°C x 70 hrs | +5 | -10.42 | -17.72 |
| 125°C x 70 hrs | +4 | -11.41 | -30.17 |
| 150°C x 70 hrs | +30 | -10.79 | -35.00 |

* Test method for Heat aging resistance : ASTM D 573

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