

# Dowhon

## Fluoroelastomer FD-40NC

### Typical Properties

Fluorine Content	65.9%
Specific Gravity	1.82
Physical form	Slab
Color	Off-white
Solubility	Ketones and Esters
Mooney Viscosity ML 1+10@ 121°C	43

### Instruction

FD-40NC is a fluoroelastomer precompound which include copolymer of hexafluoropropylene and vinylidene fluoride, curatives.

It is designed for compression molding product which require bonding with metal. It also can be used as Gasket.

It contain a new curing system, calcium hydroxide are not required in compound, so the problem such as poor dispersion or hygroscoy that caused by calcium hydroxide can be eliminated.

Features of FD-40NC are:

- Excellent mold release
- Excellent hot tear resistance
- Excellent bonding performance
- Good mold flow

### Recommended Processing Procedures

FD-40NC can be compounded with internal mixers or two-roll mills with standard fillers and other ingredients that are used in typical fluoroelastomer formulations. All the dry ingredients should be blended before adding to the

rubbery solid. During compounding, full cooling should be accompanied. After mixing, the compound should be cooled as quickly as possible.

### Packing information

FD-40NC is package with PE film in carton. The weight is 20kg net per carton.

### Safety and handling

- Store in well ventilated place
- Smoking is forbidden Strictly in working areas
- Avoid eye contact
- Wash thoroughly any contacted skin and clothing after handling.
- Further safety and handing guide, can follow the product's Material Safety Data Sheet or consult Dowhon's people.

## Typical properties of Vulcanizate

Compound	PHR
FD-40NC	100
MT Black(N990)	30
MgO	9
Carnauba Wax	1

### Rheological Properties

177°C @ 6min Arc 0.5

ML, 1b-In	1.32
MH, 1b-In	17.21
Ts2, min	1.16
T10, min	1.06
T50, min	2.23
T90, min	3.35

### Physical Properties(ASTM D-412)

Press Cure 180°C@5min,

Post Cure 250°C@1hour

Hardness, Shore A	79
Elongation at Break, %	221
Tensile, MPa	13.4

Compression set % ASTM D395, method B(O-ring)

200°C@70h, 19

### Low Temperature Resistance

TR10(ASTM D1329), °C -18

\*The above test data are based on the test performed at Dowhon facilities that we believe are reliable, your results may vary due to differences in test types and conditions.

For further information or comments, can visit Dowhon website: [www.dowhon.com](http://www.dowhon.com)

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