

Haiflon® FKM Precompound SF-BC451

Fluorine rubber (FKM) precompound — vinylidene fluoride based fluoroelastomer with incorporated cure system

Haiflon bisphenol-cured FKM precompounds are vinylidene fluoride/hexafluoropropylene copolymers with the bisphenol cure system already incorporated. They are designed for O-rings, gaskets and general compression/transfer/injection molded sealing parts, offering low compression set, excellent mold release and easy processing.

Product Features

- Wide molecular weight distribution version, excellent processing stability
- Good mold release

Basic Characteristics

Item	Typical value
Fluorine content, %	66.0
Specific gravity, g/cm ³	1.81
Physical form / color	Slab, off-white
Solubility	Ketones and esters
Mooney viscosity, ML 1+10 (121 °C)	45

Standard bisphenol test compound (phr)

Ingredient	phr
Precompound	100
MT Black (N990)	30
MgO	3
Ca(OH) ₂	6

Press cure: 180 °C × 5 min; Post cure: 230 °C × 24 h.

Typical Properties of Vulcanizate

Property	Typical value	Test method
Tensile strength, MPa	15.0	ASTM D412
Elongation at break, %	200	ASTM D412
Hardness, Shore A	75	ASTM D2240
Compression set, % (200 °C × 70 h)	16	ASTM D395, Method B
TR10 (low-temperature retraction), °C	-17	ASTM D1329

Applications

- O-rings and gaskets

Recommended Process Method

Compression *** Transfer * Injection * Extrusion ** (* suitable, ** very suitable, *** strongly recommended)

Processing Guidelines

Haiflon FKM precompounds can be compounded with internal mixers or two-roll mills together with standard fillers and other ingredients used in typical fluoroelastomer formulations. All dry ingredients should be blended before being added to the rubbery solid. During compounding, full cooling should be maintained, and after mixing the compound should be cooled as quickly as possible. Vulcanizates are press-cured and then post-cured (oven) as listed under Test Compound & Cure Conditions to develop final properties.

Safety Precautions

- Store and handle in a well ventilated place; smoking is strictly forbidden in working areas.
- Avoid eye contact; wash thoroughly any contacted skin and clothing after handling.
- Further safety and handling information can be found in the product's Safety Data Sheet (SDS).

Storage & Handling

- Store in clean, cool, dry conditions, away from direct sunlight and heat sources; keep the package sealed.
- Use on a first-in-first-out basis.

Packing

Packed in PE film, in cardboard carton; net weight 20 kg per carton. · Custom packing is available on request.