Haiflon® FKM Precompound SFM-BC451

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

Haiflon metal-bonding FKM precompounds are copolymer grades specially developed for adhesion to metal inserts during rubber-to-metal molding of oil seals, O-rings, gaskets and complicated bonding products.

Product Features

- **Excellent flow, bonding and hot part tear resistance**

Basic Characteristics

Item	Typical value
Fluorine content, %	66.0
Specific gravity, g/cm³	1.81
Physical form / color	Slab, off-white
Solubility	Ketones and esters
Mooney viscosity, ML 1+10 (121 °C)	45

Metal-bonding test compound (phr)

Ingredient	phr
Precompound	100
MT Black (N990)	30
MgO	9
Ca(OH)2	6
VPA No. 2	0.5
Aflux 25	1

Press cure: 165 °C × 45 min; Post cure: 150 °C × 4 h.

Typical Properties of Vulcanizate

Property	Typical value	Test method
Tensile strength, MPa	14.3	ASTM D412
Elongation at break, %	280	ASTM D412
Compression set, % (200 °C × 70 h)	20	ASTM D395, Method B
TR10 (low-temperature retraction), °C	-17	ASTM D1329

Applications

- **Oil seals and complicated bonding products**

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.

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