

FFKM ELAFTOR 1000



Manufacturer:
"HaloPolymer Kirovo-Chepetsk", LLC

Synonyms: FFKM
Chemical composition: TFE+PMVE+CSM
Cure type: Triazine
HS code: 3904692000
CAS: 26425-79-6

ELAFTOR 1000 is a high temperature perfluoroelastomer (FFKM) which is a copolymer of tetrafluoroethylene and perfluoromethylvinylether (TFE+PMVE+ CSM). ELAFTOR 1000 based rubbers demonstrate excellent chemical resistance in a wide range of aggressive substances including inorganic and organic acids, alkalis, most of polar solvents, amines. ELAFTOR 1000 operating temperature range is from -10° to 315°C. The product is processed by compression molding.



Parameters of raw gum*:

PROPERTIES	UNITS	TYPICAL VALUE	TEST METHOD
Appearance	-	Sheets or lumps of agglutinated crumbs	-
Mooney viscosity, ML 1+10 @ 121°C / 250°F	MU	37-90	ISO 289-1
Volatile loss	% wt.max	0,5	ISO 248 (120°C / 248°F)
Specific gravity	g/sm ³	2,05	ISO 2781
T glass transition	°C	-5	ISO 22768

* These are typical properties and are not to be used for specification purpose.

Parameters of cured gum*:

press cure 40min @ 160°C / 320°F; **post cure** heating to 200°C during 3,5h and to 200°C during 16h; Heating to 260°C during 0,5h and to 260°C during 16h

PROPERTIES	UNITS	TYPICAL VALUE	TEST METHOD
Tensile strength	MPa	15	ISO 37
Elongation	%	140	ISO 37
Compression set	%	15	ISO 815 disc (70h @ 200°C / 392°F)
		30	ISO 815 disc (70h @ 300°C / 572°F)
Hardness	Shore A	78	ISO 48-4

* Properties of cured rubber are not to be used for specification purpose.

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Compound Formulation:

FORMULATION	UNITS	TYPICAL VALUE
Rubber	Phr	100
2,2-bis(3-amino-4-hydroxyphenyl)- hexafluoropropane	Phr	1
N-990MT Carbon Black	Phr	25



Main application:

Valve gaskets, membranes, pumps, compressors in chemical and oil industries, other industries including paints and coatings, semiconductor applications including plasma



Package:

Elafitor 1000 is available in 22kg box



Safety and Handling:

- Handle in well-ventilated areas;
- Fumes must not be inhaled;
- Eye and skin contact must be avoided. In case of skin and eye contact wash with water immediately and seek medical help;
- Smoking is prohibited;
- Do not use metallic particulate as mixing agent as it can decompose at high temperature;
- Store away from heat, keep in clean and dry area.

Before using perfluoroelastomer please read the Material Safety Data Sheet carefully.