

147501003

FOOD&BEVERAGE + MEDICAL

The FFKM **147501003** Compound has developed this new family that is compatible with medical and food standards. The food approvals and the possible black and white colors obtained on the materials allow safe use in the food & beverage industry as well as in the medical/pharmaceutical field.

The FFKM **147501003** Compound is a universal FFKM that best reconciles high-temperature resistance and performance in chemically aggressive environments. Certified according to FDA cfr.21 – 177.2600, 3-A Sanitary and USP Class VI.

147501003 FFKM 75 black CH FDA

Rev. 05

GENERAL CHARACTERISTICS

General Applications:	Food & Beverage + Medical
Colour:	Black
Temperature Range:	From -20°C to +275°C
Curing System:	Peroxide
Compliances:	FDA Crf.21 – 177.2600 3-A Sanitary USP Class VI <87 & 88>

PHYSICAL AND MECHANICAL PROPRIETIES

Property	Test STD	Unit	Value
Density	DIN 53479	g/cm ³	2.14 ± 0.03
Hardness	DIN 53505	Shore A	75 ± 5
Tensile Strength	DIN 53504 S2	MPa	>16
Elongation	DIN 53504 S2	%	> 160

LOW TEMPERATURE RESISTANCE

Property	Test STD	Unit	Value
TR10	ASTM D1329	°C	< -2

COMPRESSION SET TESTS

Parameters	Test STD	Unit	Value
48h @ 200°C	ISO 815-1	%	< 21
72h @ 200°C	ISO 815-1	%	< 28

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Key

A1 → <10% Swelling
 A2 → <25% Swelling
 A3 → <35% Swelling

Notes

Chemical Resistance

Chemical	Rating
Aldehydes	A1
Alcohols	A1
Alkalis	A1
Amines (RT)	A1
Esters	A1
Ethers	A1
Hot Amines	A2
Hydrocarbons	A1
Inorganic Acids	A1
Ketones	A1
Organic Acids	A1
Strong Oxidizers	A1
Sour Gas	A1
Water/Steam	A2

AGEING PROPERTIES

Heat Aging – 168h @ 200°C **Standard:** DIN 53508

Properties	Unit	Value
Hardness	Shore A	+1.3
Tensile Strength	%	+3.0
Elongation	%	+7.0
Volume	%	
Weight	%	

MEK – 168h @ 23°C **Standard:** DIN 53521

Properties	Unit	Value
Hardness	Shore A	+0.0
Tensile Strength	%	+1.7
Elongation	%	
Volume	%	
Weight	%	

TOLUENE – 168h @ 70°C **Standard:** DIN 53521

Properties	Unit	Value
Hardness	Shore A	-4.2
Tensile Strength	%	+4.1
Elongation	%	
Volume	%	
Weight	%	

Standard:

Properties	Unit	Value
Hardness	Shore A	
Tensile Strength	%	
Elongation	%	
Volume	%	
Weight	%	

Disclaimer

Tests performed on test slabs. Temperatures, applications, and indications are meant as basic suggestions and valid for static applications with no other specific media and or conditions.