









## Radiation cross-linkable VITON® fluoro-elastomeric compound

<p>■ <b>Compound class</b> Insulation / sheathing</p>	<p>■ <b>Compound category</b> </p>	<p>■ <b>Flame retardant</b> Halogenated</p>
<p>■ <b>Standards</b> ISO 6722-1 Class F</p>	<p>■ <b>Oil resistance level</b> ★★★★★</p>	
<p>■ <b>Operating temperature [C°]</b> -55 to 225</p>		
<p>■ <b>Typical applications</b> <i>This modified fluoro-elastomer based compound is the right choice for manufacturing very flexible wires and cables. Applications in harsh environments in military, aerospace, automotive and other industries, where high performance takes first place.</i></p>		
		
<p>Marine, Aerospace, Defence</p>	<p>Automotive</p>	
<p>■ <b>Features</b></p>		
 Flame retardant	 Oil resistant	 High temperature resistant
 Flexible	 Flexible at low temperatures	

## PHYSICAL PROPERTIES

Physical properties	Unit	Typical value	Test method
Density*	g/cm <sup>3</sup>	<b>1.9</b>	ASTM D 792
Hardness*	Shore A	<b>74</b>	DIN ISO 7619-1
Melt Flow Index (230°C; 21,6kg)	g/10 min	<b>12</b>	DIN EN ISO 1133

## MECHANICAL PROPERTIES

Before crosslinking **	Unit	Typical value	Test method
Tensile strength	N/mm <sup>2</sup>	<b>3</b>	IEC 60811-501
Elongation at break	%	<b>450</b>	IEC 60811-501
After crosslinking ***	Unit	Typical value	Test method
Tensile strength	N/mm <sup>2</sup>	<b>12</b>	IEC 60811-501
Elongation at break	%	<b>&gt;200</b>	IEC 60811-501
After ageing in air oven 168h at 250°C***	Unit	Typical value	Test method
Elongation at break	%	<b>200</b>	IEC 60811-401

## THERMAL PROPERTIES\*\*\*

■ Low temperature tests	Unit	Typical value	Test method
Cold impact at -40°C	-	<b>No cracks</b>	ASTM D 746
Low temp. flexibility at -70°C	-	<b>No cracks</b>	ASTM D 2671C
■ Heat tests	Unit	Typical value	Test method
Heat shock 4h at 300°C	-	<b>No cracks</b>	ASTM D 2671

## ELECTRICAL PROPERTIES\*

■ Major electrical properties	Unit	Typical value	Test method
Volume resistivity	Ω cm	<b>&gt;10<sup>14</sup></b>	ASTM D 257

## BURNING PROPERTIES\*

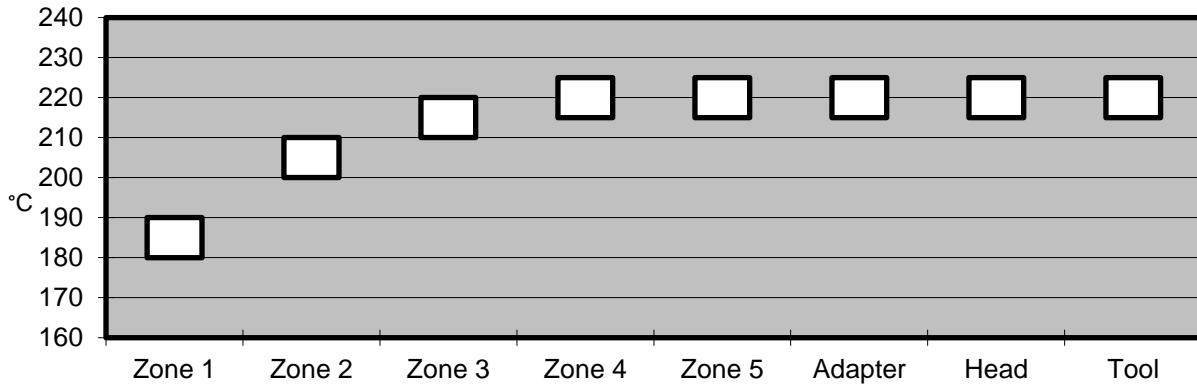
■ Main burning properties	Unit	Typical value	Test method
LOI	%	<b>43</b>	ASTM D 2863 A
Flammability	-	<b>Self-extinguishing</b>	ASTM D 2863 A
Resistance to flame	-	<b>&lt; 2 sec. after burn</b>	ISO 6722

\* pressed plaques  
 \*\* extruded tapes  
 \*\*\* cross-linked plaques

## PROCESSING GUIDE

■ **Temperature profile extruder**

The profile shown below may vary slightly depending on extruder type, head design & output.



■ **Maximum mass temperature**

250°C

■ **Recommended colour master batches**

We recommend to use high quality, well dispersed PVDF master batch 0,5-1,0%. For black jacket applications, UV resistance can be obtained by adding a higher level of master batch depending on requirements and type of carbon black master batch used.

## CROSSLINKING INFORMATION

■ **Recommended radiation dose**

75-100 kGy

■ **Radiation information**

A typical dose of 75 kGy will result in a hot-set-elongation < 75% (at 200°C and 20 N/cm²). We recommend to do some initial tests to find the optimum for the required application.

## STORAGE INFORMATION

■ **Form & packaging**

Pellets in sizes 2.8mm, PE-bags (25 kg)

■ **Shelf life**

1 year after production

Note: The information given in this datasheet is believed to be accurate and reliable. However, no warranty, express or implied, or guarantee is given as to the suitability, accuracy, reliability or completeness of the information. This information does not hold us liable for damages or penalties resulting from following our suggestions or recommendations.