



*product information*

## AFLAS<sup>®</sup> 150C

### DESCRIPTION

AFLAS<sup>®</sup> Fluoroelastomers are copolymers of tetrafluoroethylene and propylene. This combination gives AFLAS<sup>®</sup> Fluoroelastomers unique properties over conventional FKM-type fluoroelastomers in demanding applications found in the oil & gas, chemical process, wire & cable, industrial equipment, food handling, pharmaceutical, heavy duty diesel and automotive industries. AFLAS Fluoroelastomers display outstanding resistance to heat, acids & bases, many solvents, ozone, and steam. Classified by ASTM D 1418-01 as FEPM.

### MATERIAL FEATURES

- Excellent base and amine resistance unmatched by FKM-type fluoroelastomers
- Extremely high electrical resistivity, compared with other elastomers
- High heat resistance compared to FKMs
- Outstanding steam resistance
- Low viscosity
- Excellent elongation

### END USER BENEFITS

- Excellent processing for wire extrusion
- Can be pigmented
- Flexibility modifier for thermoplastics

### TYPICAL APPLICATIONS

- Wire insulator
- Cable jacket
- Additive
- And more...

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**CURE AND CONDITIONS**

AFLAS 150C must be optimally formulated to take full advantage of its physical properties. Note that the optimal formulation depends on the intended use.

AFLAS 150C is electron-beam curable. TAIC\* is the recommended co-agent and is required for the cure. Extrusion conditions (temperature and time) should be decided in consideration of various factors, such as the size of parts, required properties, scorch safety and mold release.

\*Triallylisocyanurate

If at any time you have questions or concerns about a specific application, please contact your account manager for assistance.

**AFLAS 150C COMPOUND COMPARATIVE PROPERTIES**

Property	Units	AFLAS 150C
Tg (Glass transition temperature)	°C	-3
TR-10	°C	+3
Brittle Point	°C	-40
Tensile Strength, Yield	MPa/psi	19/2756
M100	MPa/psi	1.5/218
Elongation	%	400
Fluorine Content	%	57
Mooney (ML1+10)	kN/m	>160 (100°C) >160 (121°C)
G' Storage Modulus (nominal) of Raw Gum	kPa	490

**Formulation(PHR):**

AFLAS 150C

**Cure Conditions:**

100 kGy of Electron beam irradiation

NOTE: The data listed here represents typical values for the stated grades of AFLAS® fluoroelastomers. This information should be used as a guide only and not to establish specification limits or design criteria. AGC Chemicals Americas assumes no obligation or liability for any advice furnished by us or for results obtained with respect to this product. All such advice is provided free of charge and the buyer assumes sole responsibility for results obtained in reliance thereon.

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### AFLAS 150C ELECTRICAL PROPERTIES DATA

Property	Units	AFLAS 150C
Volume Resistivity	$\Omega$ cm	$>10^{16}$
Dielectric constant 1kHz, R.T.		2.8
Dielectric breakdown	kV/mm	24

### HANDLING PRECAUTIONS

AFLAS Fluoroelastomers are stable at normal conditions and are not regulated by the U.S. Department of Transportation. Avoid temperatures above 400°C. Fluoroelastomers can react with molten alkali metals and finely divided magnesium and aluminum at temperatures above 425°C. Thermal decomposition of this product at temperatures above 400°C will generate hydrogen fluoride, which is corrosive. No polymerization will occur under normal processing conditions.

The shelf life of AFLAS Fluoroelastomers can be guaranteed by AGC Chemicals for 6 months after date of delivery for unopened packages. However the properties are not impacted by storage time. Storage and handling facilities should be designed to minimize exposure to extreme temperatures and dusty environments.

Wear protective gear and avoid tobacco use at all times when handling fluoroelastomers. Consult your Material Safety Data Sheet for safe handling details or contact your AGC Chemicals Technical Representative for clarification.

### For more information and samples contact

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