



## Preliminary Technical Information



# Dyneon™ PFA 6525T Z Fluorothermoplastics

### Features

- Wide service temperature range
- Excellent, almost universal resistance to solvents and chemicals
- Extremely high weathering resistance and UV stability
- Excellent electrical insulation properties, e. g.
  - dielectric breakdown strength
  - dielectric constant
- High LOI (limiting oxygen index); does not support combustion
- Smooth surfaces
- Good non-stick characteristics
- Good low-friction properties
- Broad processing window
- Improved stress crack resistance

### Typical properties\*

Property	Test Method	Unit	Value
Specific Gravity	DIN EN ISO 12086	g/cm <sup>3</sup>	2.15
Melting Point	DIN EN ISO 12086	°C	308
MFI (372 °C/5 kg)	DIN EN ISO 1133	g/10 min	25
LOI	ASTM D2863	%	> 95

### Mechanical properties\*

Hardness Shore D	ASTM D2240		60
Tensile at break	DIN EN ISO 527-1	MPa	20
Elongation at break	DIN EN ISO 527-1	%	350

\*typical values

### Introduction

Dyneon™ PFA 6525T Z Fluorothermoplastic (a fully fluorinated copolymer of tetrafluoroethylene and perfluorovinylether) has exceptional heat resistance, excellent electrical properties and excellent chemical and weather resistance.

### Processing

Dyneon™ PFA 6525T Z Fluorothermoplastic should be processed according to the standard conditions outlined in the Dyneon PFA Processing Guideline Brochure. All machine parts coming into contact with the melt should be made from highly corrosion resistant materials – usually high-nickel alloys such as Inconel 625, Haynes 242, Hastelloy C and Reiloy. The normal chrome-nickel steels, such as 1.4571, have only limited suitability.

Processing temperatures (melt temperatures) between 360 °C and 390 °C are typical, depending on the particular process and part being produced. In injection molding, mold temperatures of up to 250 °C are required.

The machine temperature control system should be as precise and responsive as possible.

Dyneon™ PFA 6525T Z Fluorothermoplastic, with a Melt-Flow-Index (372 °C/5 kg) of 25 g/10 min is a material with a very low melt viscosity and is used in high shear processes like wire and cable extrusion and injection molding if the 15 MFI grade does already show signs of excessive shear in order to reach higher processing speeds.

### Supply form

Dyneon™ PFA 6525T Z Fluorothermoplastic will be supplied in pellet form. Container size:

- 50 kg cardboard carton containing two 25 kg PE bags



# Dyneon™ PFA 6525T Z Fluorothermoplastics PFA



## Storage and Material Handling

Storage life can be affected by storage conditions (product should be stored in a clean, dry location), but the material can generally be stored for more than three years. This product is hydrophobic and generally does not require drying before processing unless high humidity conditions create surface moisture absorption. Opened containers should be tightly resealed to prevent dust contamination from static charge accumulation and moisture ingress.

## Safety/Toxicology

This is a fluorothermoplastic material, so normal precautions observed with fluorothermoplastic should be followed. Before processing these products, consult the Material Safety Data Sheet and follow all label directions and handling precautions. General handling/processing precautions include: (1) Process only in well ventilated areas; (2) Do not smoke in areas contaminated with powder/residue from these products; (3) Avoid eye contact; (4) After handling these products wash any contacted skin with soap and water. Potential hazards, including evolution of toxic vapors, can exist if processing occurs under excessively high temperature conditions. Vapor extractor units should be installed above processing equipment. When cleaning processing equipment, do not burn off any of this product with an open flame or in a furnace.

## Our Worldwide Commitment to Quality

Indicative of our commitment, most Dyneon design, development, production and service facilities have achieved global quality management certification. Production facilities have also received certification for their environmental management system. Please see the Dyneon website ([www.dyneon.com](http://www.dyneon.com)) for the most up-to-date certification details.

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This Dyneon product is a newly introduced product that has not been fully commercialized. As a result, the formulation, manufacturing process, performance characteristics, and other properties of this product are not guaranteed and are subject to change without notice, provided that the Dyneon product will meet Dyneon's then current product specification. User is responsible for evaluating and determining whether this Dyneon product is suitable and appropriate for a particular use and intended application. The conditions of evaluation, selection, and use of the Dyneon product can vary widely and affect the use and intended application of the Dyneon product. Because many of these conditions are uniquely within the Buyer's knowledge and control, Buyer must evaluate and determine whether the Dyneon product is suitable and appropriate for a particular use and intended application.

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