

Teflon® PTFE 7A X

Polytetrafluoroethylene

DuPont Fluoropolymers

Message:

Teflon ® PTFE 7A X is a white powder with small particle size and high bulk density. The small particle size of Teflon ® PTFE 7A X helps to minimize voids even at relatively low molding pressures. High bulk density increases the size of moldings possible from a given mold or press opening. Teflon ® PTFE 7A X is preferred for large moldings, such as billets, requiring optimum mechanical and electrical properties. It is also used in a mixture with fillers when they are added to modify the mechanical properties of moldings. Properly processed products made from neat Teflon ®PTFE 7A X provide the superior properties typical of the fluoroplastic resins: retention of properties after service at 260 °C (500 °F), useful properties at -240 °C (-400 °F), chemical inertness to nearly all industrial chemicals and solvents, and low friction and anti-stick surfaces. Dielectric properties are outstanding and stable with frequency and temperature. Molded products have moderate stiffness and high elongation.

Teflon ® PTFE 7A X resists ignition and does not promote flame spread. When ignited by flame from other sources, the contribution of heat is small and with little smoke. Statements, or data, regarding behavior in a flame situation are not intended to reflect hazards presented by this or any other material when under actual fire conditions.

Typical Applications

Many end products are fabricated from moldings of Teflon ® PTFE 7A X, including skived film and sheet, gaskets, packings, mechanical seals, bridge or pipeline bearing pads, shaft bearings, electrical insulators, piston rings, expansion bellows, diaphragms, and chemical linings. The use of fillers provides a wide choice of modified mechanical properties.

General Information	
UL YellowCard	E54681-244684
Features	Food Contact Acceptable
	Good Chemical Resistance
	Good Stiffness
	High Elongation
	Low Friction
	Low Smoke Emission
Uses	Solvent Resistant
	Bearings
	Diaphragms
	Electronic Insulation
	Film
	Gaskets
	Liners
	Sealing Devices
	Seals
Agency Ratings	Sheet
	FDA 21 CFR 177.1550
	White
Appearance	
Forms	Powder
Processing Method	Compression Molding
	Sintering

Physical	Nominal Value	Unit	Test Method
Specific Gravity	2.15	g/cm ³	ASTM D4894, ISO 12086
Apparent Density	0.46	g/cm ³	ASTM D4894, ISO 12086
Average Particle Size			
--	34	μm	ISO 13320
--	34	μm	ASTM D4894
Water Content			
--	< 0.040	%	ISO 12086
--	< 0.040	%	ASTM D4894
Thermal Instability Index			
--	< 3.00		ISO 12086
--	< 3.00		ASTM D4894
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (0.130 mm)	34.5	MPa	ASTM D4894, ISO 12086
Tensile Elongation (Break, 0.130 mm)	380	%	ASTM D4894, ISO 12086
Thermal	Nominal Value	Unit	Test Method
Melting Temperature			ISO 12086, ASTM D4894
-- ¹	317 to 337	°C	
-- ²	334 to 354	°C	
NOTE			
1.	Second		
2.	Initial		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

