20% CAF2 BROWN

(80% VIRGIN PTFE+ 20% CALCIUM FLORIDE+ SPECIAL IRON OXIDE)

COLOR MATERIAL

PTFE Calcium Fluoride Compound preferred for parts and components requiring good mechanical properties.

This material offers an excellent combination of properties typical of the PTFE fluoropolymer resins:

- Service Temperature: offers excellent resistance to continuous service temperatures – working conditions from -100° C (-148°F) up to 250°C (482°F) and, for limited periods, even to higher temperatures; product's low temperature resistance allows satisfactory performance down to -200°C (-328°F).
- Chemical resistance: offers high inertness towards nearly all known chemicals. Only attacked elemental alkali metals, chlorine trifluoride and elemental fluorine at high temperature and pressures might affect properties.
- Solvents resistance: offers insoluble properties in all solvents up to temperatures as high as 300° C (572° F). Certain highly fluorinated oils only swell and dissolve PTFE at temperatures close to the crystalline melting point.

Properties

- Improved thermal dimensional stability
- Excellent chemical stability
- Improved creep resistance
- Excellent electrical insulating properties
- Improved compression strength
- Reduced friction & wear; Low friction behaviour
- Exceptional temperature resistance
- Improved surface hardness

Main applications

PTFE Calcium Fluoride Compound offers excellent properties in the chemical processing, in automotive industries, in sealing application and in mechanical applications in general for bushing, sliding pads, piston rings, seals and machined parts.
Its excellent load and wear behaviour together with its compatibility with a wide range of mating surfaces make a good choice formost food and pharmaceutical bearing applications.
can replace glass filled PTFE in uses where it comes in contact with chemicals that attack glass, such as hydrofluoric acid and strong alkalis.

Statement on suitability for contact with foodstuff

FDA Approved US Regulation

- Code of Federal regulation 21 CFR Ch.1; section 177.1550 Perfluorocarbon Resins of the Food and Drug Administration/US.

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COLOR MATERIAL

Property		Method	Units	Specification
Physical	Color	-	-	Brown
	Specific gravity	ASTM D792	g/cm ^{3}	2,23-2,29
	Water absorption	ASTM D570	%	0,03
	Flamability	UL 94		V-0
Mechanical	Tensile strength	ASTM D4745	MPa	≥ 15
	Elongation	ASTM D4745	%	≥ 150
	Hardness	ASTM D2240	Shore D	≥ 60
	Ball Hardness	ASTM D785	MPa	≥ 27
	Deformation under load (140 Kg/cm2 for 24 hrs. At 23° C)	ASTM D621	%	9 - 11
	Permanent deformation (after 24 hrs. Relaxation at 23° C)	ASTM D621	%	5 - 7
	Coefficient of static friction	ASTM D1894		0,17 – 0,20
	Coefficient of dynamic friction	ASTM D1894		0,12 – 0,14
	Wear coefficient	-	$\frac{cm^3 \text{ min } 10^{-8}}{Kg\ m\ h}$	15 - 25
Thermal	Thermal conductivity	ASTM C177	W/ m*K	0,40
	Coefficient of linear thermal expansion From 25 to 100 °C	ASTM D696	10^{-5}/ °C	9 - 12
Electrical	Volume resistivity	ASTM D257	Ohm*cm	10 ^{15}
	Surface resistivity	ASTM D257	Ohm	10 ^{14}