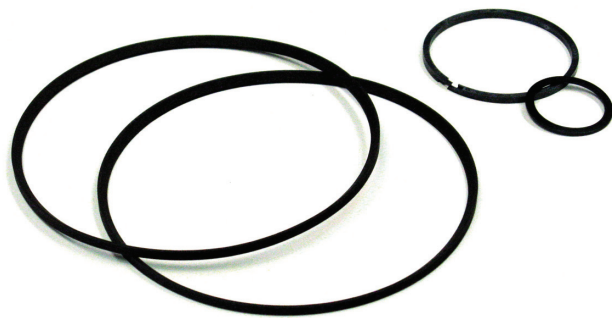


Excellent Machinability,
Stability and Performance Value

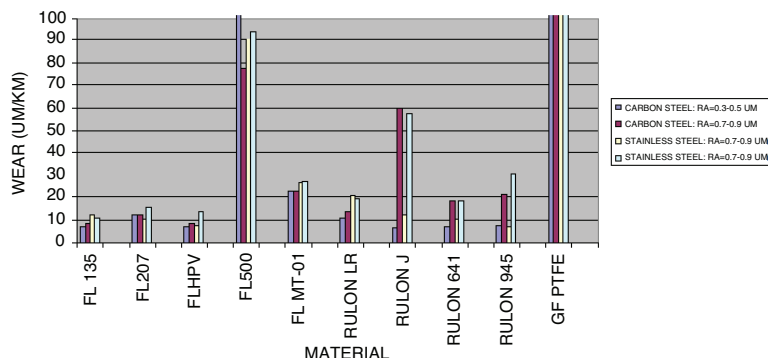
**SIMPLY NO
SUBSTITUTE**

Fluorosint® 135



WEAR RATE AT HIGH TEMPERATURE

WEAR AT 150°C (0-28.5KM / 300°F (0-17.7MI))
PLASTIC PIN ON ROTATING STEEL DISK, SPEED = 0.33 M/S, PRESSURE = 3 MPA, PIN DIAMETER = 6MM
PLASTIC PIN ON ROTATING STEEL DISK, SPEED = 65.0 FT/MIN, PRESSURE = 435 PSI, PIN DIAMETER = 0.236"



Competitive Advantage

- Quadrant's Fluorosint® product family is not the same old typical PTFE compound. Fluorosint® is well known for its strong ability to out perform where all other compounds fall short. May it be the continuous use temperatures up to 500° F, improved deformation under load, lowest coefficient of friction or the low uniform coefficient of linear thermal expansion, Fluorosint® simply performs.
- Our newest, Fluorosint® 135 blend offers high performance at an extremely competitive price position. A perfect blended material which provides extreme performance for seals, bearings and wear applications. The lowest coefficient of friction material along with low deformation provides superior performance over typical filled PTFE compounds.

Application Highlights

- Compressor, Pump and Valve wear parts
- Seals, bearings, thrust washers and seats
- Insulating blocks and fixtures in diagnostic equipment
- Compressor Piston Rings, Rider Bands & Packing Sets
- Lubricated or Non-lube dry running applications
- Typical Air, Hydrogen, Nitrogen, Refrigerant gas service
- Service temperatures of 450°F / 232°C
- Increased part life and improved performance
- Applications in Chemical Processing, Medical, Aerospace, and Food Market

Key Benefits

Compared to other filled PTFE compounds

- Lowest wear rate
- Lowest CLTE
- Lowest COF
- Lowest Deformation
- Counter surface has little effect on performance
- No excessive run in period
- Extremely Chemically Inert



QUADRANT

Acetron®
GP

Duratron®
PAI, PEI, PI, PBI

Etalyte®
PET-P

Fluorosint®
PTFE

Ketron®
PEEK

Nylatron®
PA6

Sanalite®
HDPE/PP

Semtron®
ESd

Symalit®
Fluoropolymer

Techtron®
PPS

TIVAR®
UHMW-PE

Data Sheet - Fluorosint® 135

	Property	Units	Test Method	Typical Average Value
Mechanical Properties	Specific Gravity @ 73°F	-	ASTM D792	1.91
	Ultimate Tensile Strength	psi	ASTM D638	1,300
	Tensile Modulus	psi	ASTM D638	370,000
	Elongation, at break	%	ASTM D638	3
	Shear Strength	psi	ASTM D732	
	Flexural Strength	psi	ASTM D790	2,500
	Flexural Modulus of Elasticity	psi	ASTM D790	300,000
	Compressive Strength @ 10% Deformation	psi	ASTM D695	7,000
	Compressive Modulus	psi	ASTM D695	200,000
	Hardness, Rockwell	-	ASTM D785	R80
Notched Izod Impact (1/8")	ft-lb/in. of notch	ASTM D256		
Thermal Properties	Coefficient of Liner Thermal Expansion -40°F to 300°F	in./in./°F	ASTM E831	2.5 x 10-5
	Deflection Temperature @ 264 psi	°F	ASTM D648	
	Tg-Glass Transition (amorphous)	°F	ASTM D3418	NA
	Tm - Melting Point (crystalline)	°F	ASTM D3418	621
	Continuous Use Temperature (1)	°F	-	500
	Thermal Conductivity	BTU in./(hr. ft.2 °F)	ASTM F433	
Electrical Properties	Dielectric Strength	Volts/mil	ASTM D149	
	Surface Resistivity	ohms/sq.	EOS/ESD S11.11	>1013
	Volume Resistivity	ohms/sq.	EOS/ESD S11.11	
	Dielectric Constant, 106 Hz	-	ASTM D150	
	Dissipation Factor, 106 Hz	-	ASTM D150	
Flammability	UL-94 @ 1.5 mm (1/16 in.) estimated rating based on available data (3)	-	UL-94	V-0
Tribological	Coefficient of Friction - Static (50 lb. load, 90° rotation)	-	QTM 55007	0.20
	Coefficient of Friction - Dynamic (unlub.)	20 ft./min. x 250 psi	QTM 55007	0.15
	Limiting PV with 4:1 safety factor applied	ft. lbs./in.2 -min.	QTM 55007	14,300
	Wear Factor x 10 ⁻¹⁰ , at 50 psi x 100 fpm	in ³ -min./ft. lbs. hr	QTM 55100	32
Other	Water Absorption, %, 24 Hours @ 73° F (2)	% by wt.	ASTM D570	0.1
	Water Absorption, %, saturation @ 73° F (2)	% by wt.	ASTM D570	0.3
Solvents	Acids, Weak, 73° F; acetic, dilute hydrochloric or sulfuric acid		-	A
	Acids, Strong, 73° F; conc. hydrochloric or sulfuric acid		-	A
	Alkalies, Weak, 73° F; dilute ammonia or sodium hydroxide		-	A
	Alkalies, Strong, 73° F; conc. ammonia or sodium hydroxide		-	U
	Hydrocarbons, Aromatic, 73° F; benzene, toluene		-	A
	Hydrocarbons, Aliphatic, 73° F; gasoline, hexane, grease		-	A
	Ketones, Esters, 73° F; acetone, methyl ethyl ketone		-	A
	Ethers, 73° F; diethyl ether, tetrahydrofuran		-	A
	Chlorinated Solvents, 73° F; methylene chloride, chloroform		-	A
	Alcohols, 73° F; methanol, ethanol, antifreeze		-	A
	Inorganic Salt Solutions, 73° F; sodium chloride, potassium chloride		-	A
Continuous Sunlight, 73° F		-	A	

(1) Data represents Quadrant's estimated maximum long-term service temperature based on practical field experience.

(2) Specimens: 1/8" thick x 2" diameter or square.

(3) Estimated rating based on available data. The UL-94 Test is a laboratory test and does not relate to actual fire hazard.

All statements, technical information and recommendations contained in this publication are presented in good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Quadrant Engineering Plastic Products does not guarantee the accuracy or completeness of this information and it is the customer's responsibility to determine the suitability of Quadrant's products in any given application.

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