Local Insight, Global Impact

TIPAQUE ® PFC317 & PC-3

Titanium Dioxide for Polycarbonate Performance

TIPAQUE® PFC317 and PC-3 are rutile titanium dioxide grades produced by the chloride process and treated with alumina and siloxane (+ silica for PC-3) surface treatment technology. They are specifically engineered for demanding polycarbonate applications.

Key Benefits

- Designed specifically for polycarbonate resin applications
- Excellent resistance to discoloration (yellowing)
- Helps reduce thermal degradation during processing
- Superior color brightness and whiteness
- Excellent heat resistance
- Supports long-term appearance stability in demanding applications

Application

- LED reflector plates
- Automotive optical components
- White appliance housing
- Consumer electronics enclosure

Color in Polycarbonate Resin (TiO2 content : 10PHR)

		PFC317	PC-3	Competitor-1(*)	Competitor-2(*)
Color	L	96.8	96.9	96.4	96.5
	a	-0.5	-0.4	-0.6	-0.5
	b	1.7	1.2	1.9	1.8
	W	96.3	96.4	95.9	96.0
	YI	2.8	2.0	3.1	2.9

Melt flow rate (MFR) (TiO2 content : 10PHR)

	PFC317	PC-3	Competitor-1(*)	Competitor-2(*)
MFR (g / 10min) 300°C × 3min	12.5	13.1	14.9	11.8
300°C × 30min	13.1	15.0	18.9	14.4

Properties

	PFC317	PC-3
Particle Size(μm)	0.25	0.21
TiO_2(%), min.	94	92
Post-treatment	Al, Siloxane	Si, Al, Siloxane
Crystal Form	Rutile	Rutile
Density(g/cm^3)	4.2	4.1
Bulk Density (g/ml)	1.19	1.21
Oil Absorption (g/100g)	14	15

Specially engineered for polycarbonate resins, these TiO_2 grades deliver outstanding whiteness, heat resistance, and resistance to discoloration (yellowing).
Designed for today's thinner, high-performance PC applications, they maintain appearance and stability under demanding processing conditions.

The information presented herein is believed to be reliable. However, no warranty is expressed or implied and no liability is assumed in connection with any use of this information. It is offered only for your consideration, investigation and verification.

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