



■ Titanium dioxide ■ chloride process

Grade	TiO ₂ %	Main modifier	Particle size	Average particle size (µm)	Specific gravity	Oil absorption	Specific surface area (m ² /g)	Bulk density	Classification by JIS K-5116	Classification by ASTM D-476
CR-50	95	Al	M	0.25	4.2	18	14	0.65	Rutile Type II	Type = II, III
CR-50-2	95	Al,Organic	M	0.25	4.2	17	14	0.70	Rutile Type II	Type = II, III
CR-57	95	Al,Zr,Organic	M	0.25	4.2	17	15	0.70	Rutile Type II	Type = IV
CR-80	93	Al,Si	M	0.25	4.1	20	10	0.63	Rutile Type II	Type = IV
CR-90	90	Al,Si	M	0.25	4.0	21	13	0.62	Rutile Type II	Type = IV
CR-90-2	90	Al,Si,Organic	M	0.25	4.0	20	12	0.70	Rutile Type II	Type = IV
CR-93	90	Al,Si	L	0.28	4.0	20	11	0.64	Rutile Type II	Type = IV
CR-95	90	Al,Si,Organic	L	0.28	4.0	17	13	0.75	Rutile Type II	Type = IV
CR-953	90	Al,Si,Organic	L	0.28	4.0	17	12	0.76	Rutile Type II	Type = IV
CR-97	93	Al,Zr	M	0.25	4.2	19	14	0.60	Rutile Type II	Type = IV
CR-60	95	Al	S	0.21	4.2	15	10	0.60	Rutile Type II	Type = II
CR-60-2	95	Al,Organic	S	0.21	4.2	14	10	0.65	Rutile Type II	Type = II
CR-63	97	Al,Si,Organic	S	0.21	4.2	14	10	0.90	Rutile Type II	Type = II
CR-67	92	Al	S	0.21	4.2	18	15	0.62	Rutile Type II	Type = II, III
CR-58	93	Al	L	0.28	4.2	19	16	0.65	Rutile Type II	Type = II, III
CR-58-2	93	Al,Organic	L	0.28	4.2	18	15	0.72	Rutile Type II	Type = II, III
CR-85	88	Al,Si	M	0.25	4.0	30	12	0.52	Rutile Type III	Type = IV

■ Titanium dioxide ■ sulphate process

Grade	TiO ₂ %	Main modifier	Particle size	Average particle size (µm)	Specific gravity	Oil absorption	Specific surface area (m ² /g)	Bulk density	Classification by JIS K-5116	Classification by ASTM D-476
R-820	93	Al,Si,Zn*	M	0.26	4.2	24	15	0.57	Rutile Type II	Type = IV
R-830	93	Al,Si,Zn*	M	0.25	4.2	21	13	0.65	Rutile Type II	Type = IV
R-930	93	Al,Zn*	M	0.25	4.2	19	16	0.66	Rutile Type II	Type = IV
R-980	93	Al,Organic	M	0.24	4.2	19	15	0.64	Rutile Type II	Type = IV
R-550	94	Al,Si	M	0.24	4.2	23	14	0.64	Rutile Type II	Type = II, III
R-630	94	Al	M	0.24	4.2	19	15	0.70	Rutile Type II	Type = II, III
R-680	95	Al	S	0.21	4.2	19	10	0.65	Rutile Type II	Type = II
R-670	93	Al	S	0.21	4.2	22	19	0.65	Rutile Type II	Type = II
R-580	94	Al	L	0.28	4.2	19	11	0.65	Rutile Type II	Type = II, III
R-780	88	Al,Si	M	0.24	4.0	33	17	0.53	Rutile Type III	Type = III
R-780-2	80	Al,Si	M	0.24	3.8	40	34	0.41	Rutile Type III	Type = III
R-850	90	Al,Si	M	0.24	4.0	—	12	0.55	Rutile Type II	Type = IV
R-855	90	Al,Si	M	0.26	4.0	—	19	0.45	Rutile Type II	Type = IV
A-100	98	—	S	0.15	3.9	22	11	0.51	Anatase Type I	Type = I
A-220	96	Al	S	0.16	3.9	21	12	0.54	Anatase Type II	Type = I
W-10	98	—	S	0.15	3.9	—	11	0.53	Anatase Type I	Type = I



TIPAQUE Chloride Process

For PAINT Application

Surface Treatment	Particle Size		
	Small (0.22µm)	Medium (0.25µm)	Large (0.28µm)
Al	CR-60 CR-60-2	CR-50 CR-50-2	CR-58 CR-58-2
Al + Si		CR-80 CR-90 PF-732	CR-93 CR-95
Al + Zr		CR-57 CR-97	



TIPAQUE Chloride Process

For PLASTICS Application

Surface Treatment	Particle Size		
	Small (0.22µm)	Medium (0.25µm)	Large (0.28µm)
Al	CR-60-2 CR-60 CR-61	CR-50-2 CR-50	CR-58-2 CR-58
Al + Si	PF-690 CR-63	PF-711 CR-80 CR-90	CR-93 CR-95
Al + Zr		CR-97	