

Pastel and Mid Shade Matt Tint Bases

1. Begin by finding the correct replacement ratio for an opacity match aiming to find a delta contrast ratio of no more than ± 0.2 units.
2. Tint the paint identified in (1) above with either a blue or black colorant and compare with the original paint (it is likely to be darker).
3. Now add back 1% unit of the TiO_2 removed in (1) above leaving the FP-Pigment at the original level and reducing your extender levels to maintain the pvc, tint and test again against the standard.
4. Repeat this process of adding back small amounts of TiO_2 until a colour match is made. This is your new POS Tint base formulation - note we recommend testing this formulation with your hardest to match colours to ensure a suitable Delta E is reached. If necessary repeat point (3) to reduce the Delta E to the required level.

Example:

Your replacement ladder identifies a 15% replacement as having a ΔCR of -0.12 and when you tint this paint you find the L^* value is down against the standard by -0.30 units. You add back 1% of the 15% TiO_2 you originally replaced and reduce your extenders to keep the pvc the same. This paint still has a ΔL of -0.25 which is not acceptable so you add back another 1% of the TiO_2 originally removed (adjusting the extenders to maintain pvc). This paint has a ΔL of 0.17 and a ΔE of 0.37 , both of which are deemed acceptable. This is your new POS formulation where you have replaced 13% of the original TiO_2 with 15% FP-Opacity Pigment™.

Reformulation details for this example are given over

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Formulations for Example given on page 1

		Standard	15% Replacement	15% FP-460/13% TiO2
		%	%	%
Water	Water	28.42	28.18	28.57
Cellulosic Thickener	Cellosize QP4400H	0.45	0.45	0.45
Base (pH control)	Ammonia (28%)	0.17	0.17	0.10
Dispersant	Dispex A40	0.21	0.21	0.21
Coalescing Agent	Texanol	0.81	0.80	0.82
Antifoam	Foamaster NXZ	0.15	0.15	0.15
Biocide	Acticide BX-H	0.06	0.06	0.06
Chalk	Queensfil 25	14.25	14.13	13.95
Calcined Clay	Polestar 200P	14.25	14.13	13.95
Opacifying Pigment	FP-Pigment		2.17	2.19
Titanium Dioxide	TIOXIDE® TR92	14.54	12.28	12.71
Water	Water	12.25	12.73	12.31
Antifoam	Foamaster NXZ	0.00	0.00	0.00
VAVeoVa Binder	Mowilith LDM 2383	14.45	14.55	14.52
	Total	100.00	100.00	100.00
	Vol. Solids	31.90	31.90	31.90
	TiO2vc	17.00	14.70	15.30
	Evc	51.00	53.30	52.70
	pvc	68.00	68.00	68.00
	Contrast Ratio	Std	-0.12	0.02
	Tint Strength - Blue L*	Std	-0.30	-0.17
	Tint Strength - Blue □E	Std	0.47	0.37