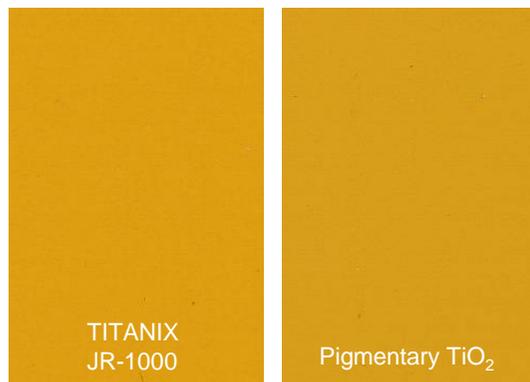


Heat blocking effect of TITANIX JR-1000 in gold colored film

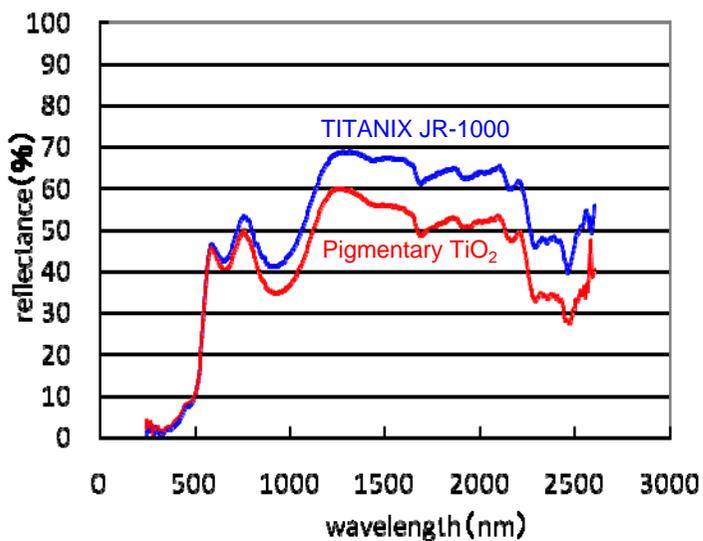
● Gold colored film sample



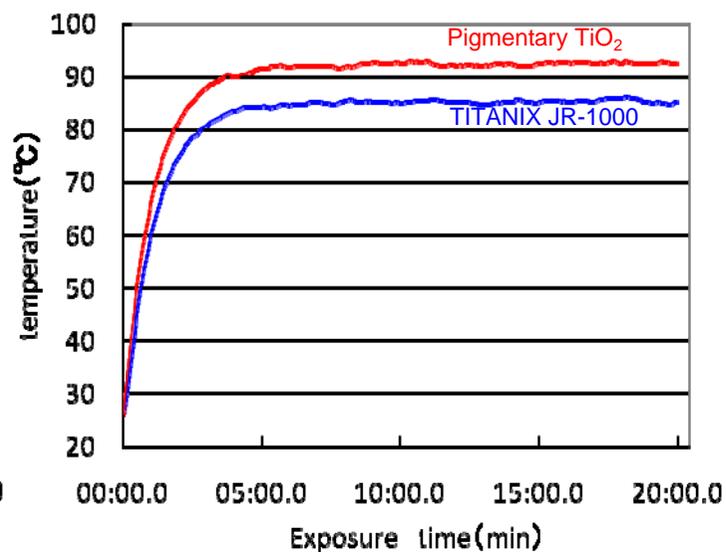
● Color pigment content, film color, & solar reflectance

	Pigment content (%)		Hunter color values			Munsell color values			Solar reflectance (%)		
	TiO ₂	yellow	L	a	b	H	V	C	300 - 780 nm	780 - 2500 nm	300 - 2500 nm
TITANIX JR-1000	50	50	55.6	9.1	31.7	0.5Y	6.1	9.0	32.3	54.3	42.5
Pigmentary TiO ₂	44	56	55.1	8.0	30.4	0.7Y	6.0	8.3	31.8	46.0	37.9

● Reflectance curves



● Heat blocking test



● Gold paint formulation & coating conditions

1) Paint formulation (Pigment concentration, 100 PHR)

Dispersion	Content (g)
Titanium dioxide & yellow pigment *1	50
Beckosol J-524 (solid content, 60%) *2	12
Xylene/Butyl alcohol = 8/2	12
Silicone for leveling	1
Letdown	Content (g)
Beckosol J-524 (solid content, 60%) *2	46.3
Super Beckamine J-820 (solid content, 60%) *2	25

*1 Yellow pigment : Iron oxide

*2 from DIC

2) Coating conditions

Coating method	Bar coater
Substrate	Tin free steel (20 × 20 cm)
Film thickness	40 μm