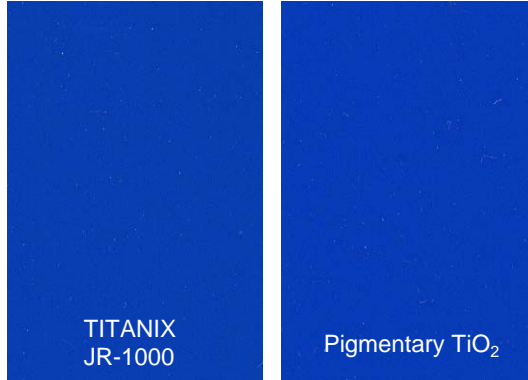


Heat blocking effect of TITANIX JR-1000 in deep blue colored film

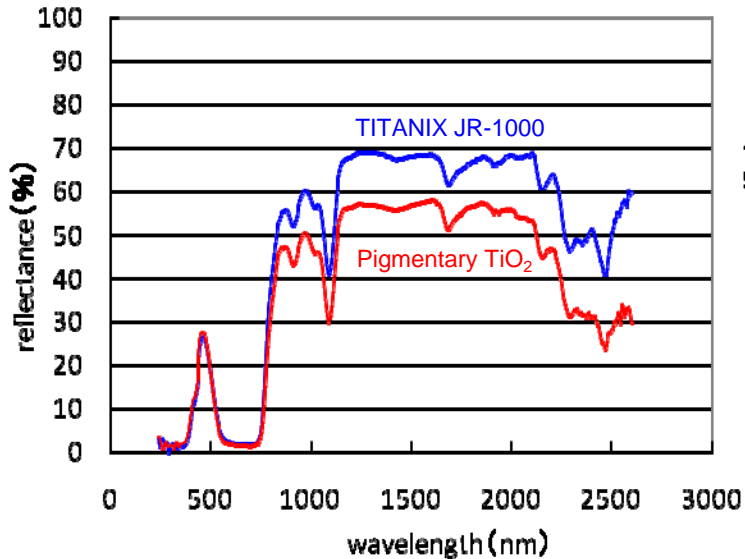
● Deep blue colored film sample



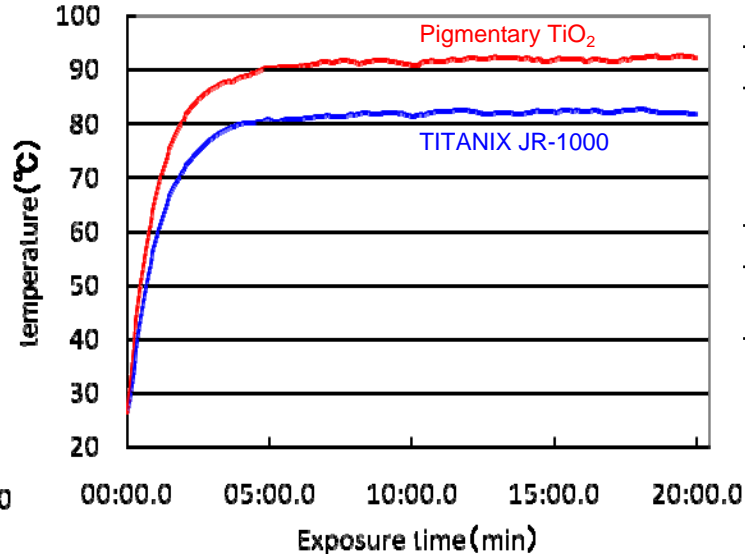
● Color pigment content, film color, & solar reflectance

	Pigment content (%)		Hunter color value			Munsell color value			Solar reflectance (%)		
	TiO ₂	blue	L	a	b	H	V	C	300 - 780 nm	780 - 2500 nm	300 - 2500 nm
TITANIX JR-1000	72	28	22.9	0.5	-45.6	2.4PB	2.7	9.8	6.3	58.0	32.2
Pigmentary TiO ₂	62	38	22.5	2.3	-50.8	3.1PB	2.6	10.6	5.9	47.6	27.1

● Reflectance curves



● Heat blocking test



● Deep blue paint formulation

& coating conditions

1) Paint formulation (Pigment concentration, 100 PHR)

Dispersion	Content (g)
Titanium dioxide & blue 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 Copper phthalocyanine blue pigment
 (Dainichiseika color & chemicals Mfg.)

*2 from DIC

2) Coating conditions

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