



# **CATHAY THERM™**

## **Thermostable Color Pigments**

























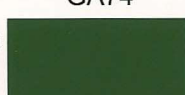
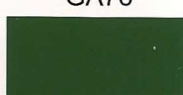










**CATHAY Industries** offers a range of high quality heat resistant pigments under the brand name **CATHAYTHERM™**. They are ideally suitable for wide range of high temperature applications, including plastics, powder coatings, high-bake temperature industrial finishes, coil coatings, military coatings, specialty coatings, ceramics, and roofing granules.

The excellent dispersion characteristics **CATHAYTHERM™** make them easily to break up and distribute in processing equipment. As with all inorganic pigments, non-migration makes them suitable for plastics and rubbers.

It is produced with strict quality tolerances and reliable performance, which offer outstanding opacity, acid and alkali resistance, chemical resistance, exterior durability and compatibility.



## Colors Represent

	RA12	RA14B	
MASS TONE			
TINT <sup>(1)</sup> TONE			
	YA22HR	YS22HR	YS23HR
MASS TONE			
TINT <sup>(1)</sup> TONE			
	F9900M	F9900MS	
MASS TONE			
TINT <sup>(1)</sup> TONE			
	F8800MS		
MASS TONE			
TINT <sup>(1)</sup> TONE			
	ZF15	ZF25	
MASS TONE			
TINT <sup>(1)</sup> TONE			
	GA74	GA76	GA78
MASS TONE			
TINT <sup>(1)</sup> TONE			
	GA74M	GA76M	GA78M
MASS TONE			
TINT <sup>(1)</sup> TONE			

<sup>(1)</sup> Tint Tone = Reduction with TiO<sub>2</sub> [1:4]



CATHAY THERM™ for Plastics	PVC-P	PVC-U	PE-HD	PE-LD	PP	PS	PS-HI	ABS	PMMA	CAB	PA	PC	PU	EVA
CATHAY THERM™ Iron Oxide Red	■	●	●	■	■	■	■	●	○	■	■	●	■	■
CATHAY THERM™ Iron Oxide Yellow	■	●	○	■	○	●	●	○	○	●	●	○	■	■
CATHAY THERM™ Zinc Ferrite	■	●	■	■	■	■	■	●	○	■	■	●	■	■
CATHAY THERM™ Manganese Ferrite Black	■	■	■	■	■	■	■	●	○	■	■	●	■	■
CATHAY THERM™ Manganese Ferrite Brown	■	■	■	■	■	■	■	●	○	■	■	●	■	■
CATHAY THERM™ Chrome Oxide Green	■	■	■	■	■	■	■	●	○	■	■	●	■	■

■ Highly recommended

● Recommended

○ Limited suitability

Product Code	Pigment Index	Chemical Composition	Purity % (Fe <sub>2</sub> O <sub>3</sub> or Cr <sub>2</sub> O <sub>3</sub> )	Oil Absorption g/100g	Density g/cm <sup>3</sup>	Sieve Residue 45 micron mesh %	Water Soluble Salts %	pH	Moisture %	Hegman	Heat Stable °C	DE	Tinting Strength %
Test Method			BS1014	ISO 787-5	ISO 787-10	ISO 787-7	ISO 787-3	ISO 787-9	ISO 787-2	ASTM D1210	DIN EN 12877-2:1999	ISO 7724-2	ISO 8781-1
<b>CATHAY THERM™ Iron Oxide Red</b>													
RA12	PR 101	Fe <sub>2</sub> O <sub>3</sub>	95+	15-25	4.8	≤0.01	≤0.3	5-8	≤1	7.0+	300	≤1	95-105
RA14B	PR 101	Fe <sub>2</sub> O <sub>3</sub>	95+	15-25	4.59	≤0.01	≤0.3	5-8	≤1	7.0+	300	≤1	95-105
<b>CATHAY THERM™ Iron Oxide Yellow</b>													
YA22HR	PY 42	Fe <sub>2</sub> O <sub>3</sub> · H <sub>2</sub> O	86+	28-40	3.91	≤0.01	≤0.2	5-8	≤1	6.0+	220	≤1	95-105
YS22HR	PY 42	Fe <sub>2</sub> O <sub>3</sub> · H <sub>2</sub> O	86+	35-45	3.94	≤0.01	≤0.3	4-8	≤1	3.0+	220	≤1	95-105
YS23HR	PY 42	Fe <sub>2</sub> O <sub>3</sub> · H <sub>2</sub> O	86+	35-45	3.92	≤0.01	≤0.3	4-8	≤1	3.0+	220	≤1	95-105
<b>CATHAY THERM™ Manganese Ferrite Black</b>													
F9900M	PBk 33	(Fe,Mn) <sub>2</sub> O <sub>3</sub>	65+	15-25	5.0	≤0.1	≤0.5	5-8	≤0.5	6.0+	>300	≤1	95-105
F9900MS	PBk 33	(Fe,Mn) <sub>2</sub> O <sub>3</sub>	65+	15-25	4.6	≤0.1	≤0.4	7-10	≤0.5	--	>300	≤1	95-105
<b>CATHAY THERM™ Manganese Ferrite Brown</b>													
F8800MS	PBr 43	(Fe,Mn) <sub>2</sub> O <sub>3</sub>	65+	~28	4.5	≤0.1	≤0.8	5.5-8.5	≤0.5	--	>300	≤1	95-105
<b>CATHAY THERM™ Zinc Ferrite</b>													
ZF15	PY 119	ZnFe <sub>2</sub> O <sub>4</sub>	65+	15-25	4.9	≤0.1	≤0.5	5-8	≤0.5	6.0+	>300	≤1	95-105
ZF25	PY 119	ZnFe <sub>2</sub> O <sub>4</sub>	65+	15-25	4.91	≤0.1	≤0.3	5-8	≤0.5	6.0+	>300	≤1	95-105
<b>CATHAY THERM™ Chrome Oxide Green</b>													
GA74	PG 17	Cr <sub>2</sub> O <sub>3</sub>	98.5+	15-25	5.1	≤0.06	≤0.3	5-8	≤1	3.0+	>300	≤1	95-105
GA76	PG 17	Cr <sub>2</sub> O <sub>3</sub>	98.5+	9-16	5.1	≤0.06	≤0.3	5-8	≤1	3.0+	>300	≤1	95-105
GA78	PG 17	Cr <sub>2</sub> O <sub>3</sub>	98.5+	9-16	5.1	≤0.06	≤0.3	5-8	≤1	3.0+	>300	≤1	95-105
GA74M	PG 17	Cr <sub>2</sub> O <sub>3</sub>	98.5+	15-25	5.0	≤0.005	≤0.3	5-8	≤1	6.0+	>300	≤1	95-105
GA76M	PG 17	Cr <sub>2</sub> O <sub>3</sub>	98.5+	9-16	4.96	≤0.06	≤0.3	5-8	≤1	6.0+	>300	≤1	95-105
GA78M	PG 17	Cr <sub>2</sub> O <sub>3</sub>	98.5+	9-16	5.1	≤0.06	≤0.3	5-8	≤1	6.0+	>300	≤1	95-105





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