
CathayTherm™
THERMOSTABLE COLOR PIGMENTS
Iron Oxide to the Core

CATHAYTHERM™

Cathay Industries offers a range of high quality heat resistant pigments under the brand name CathayTherm, which are ideally suitable for a wide range of high temperature applications, including plastics, powder coatings, coil coatings, military coatings, specialty coatings, ceramics, and roofing granules.

The excellent dispersion characteristics of CathayTherm make them adaptable to most equipment and processes. As with all inorganic pigments, non-migration makes them suitable for plastic and rubber. CathayTherm pigments are FDA approved for indirect food contact applications.

CathayTherm is produced with strict quality tolerances resulting in reliable performance. CathayTherm pigments have outstanding opacity, acid and alkali resistance, chemical resistance, exterior durability and compatiblity.

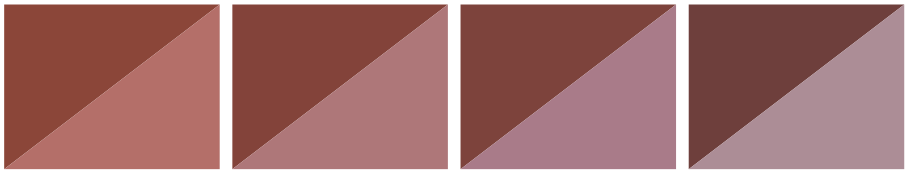
CATHAYTHERM for Plastics	PVC-P	PVC-U	PE-HD	PE-LD	PP	PS	PS_HI	ABS	PMMA	CAB	PA	PC	PU	EVA
Iron Oxide Reds	+	•	•	+	+	+	+	+	○	+	+	+	+	+
Iron Oxide Yellows	+	•	○	+	+	+	+	○	○	+	+	○	+	+
Zinc Ferrite	+	•	+	+	+	+	+	+	○	+	+	•	+	+
Manganese Ferrite Black	+	+	+	+	+	+	+	+	○	+	+	•	+	+
Manganese Ferrite Brown	+	+	+	+	+	+	+	+	○	+	+	•	+	+
Chrome Oxide Green	+	+	+	+	+	+	+	+	○	+	+	•	+	+

+ Highly Recommended • Recommended ○ Limited Suitability

COLOR SHADES & TYPICAL PHYSICAL PROPERTIES

Colors Represent Mass Tone and Tint Tone (Reduction with TiO_2 1:4)

Product Code	Pigment Index	Chemical Composition	Purity, % (as Fe203)	Oil Absorption (g/100g)	Density (g/cm^3)	Sieve Residue on 325 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
IRON OXIDE REDS													
RA12HR	PR 101	Fe_2O_3	95+	15-25	4.8	≤ 0.01	≤ 0.3	5 - 8	≤ 1	7.0+	> 300	≤ 1	95-105
RA14HR	PR 101	Fe_2O_3	95+	15-25	4.8	≤ 0.01	≤ 0.3	5 - 8	≤ 1	7.0+	> 300	≤ 1	95-105
RA15HR	PR 101	Fe_2O_3	95+	15-25	4.8	≤ 0.01	≤ 0.3	5 - 8	≤ 1	7.0+	> 300	≤ 1	95-105
RA18HR	PR 101	Fe_2O_3	95+	15-25	5.0	≤ 0.01	≤ 0.3	5 - 8	≤ 1	7.0+	> 300	≤ 1	95-105



RA12HR RA14HR RA15HR RA18HR

IRON OXIDE YELLOWS													
YA22HR	PY 42	$Fe_2O_3 \bullet H_2O$	86+	28 - 40	3.91	≤ 0.01	≤ 0.2	5 - 8	≤ 1	6.0+	> 220	≤ 1	95-105
YA23HR	PY 42	$Fe_2O_3 \bullet H_2O$	86+	28 - 40	3.91	≤ 0.01	≤ 0.2	5 - 8	≤ 1	6.0+	> 220	≤ 1	95-105
YA22XR	PY 42	$Fe_2O_3 \bullet H_2O$	70+	44 - 55	3	≤ 0.01	≤ 0.5	5 - 8	≤ 1	–	> 260	≤ 1	95-105
YA22XRS	PY 42	$Fe_2O_3 \bullet H_2O$	70+	35 - 45	4	≤ 0.003	≤ 0.5	5 - 8	≤ 1	–	> 260	≤ 1	95-105

YA22HR YA23HR YA22XR YA22XRS

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ZINC FERRITES													
ZF15	PY 119	$ZnFe_2O_4$	65+	15 - 25	4.9	≤ 0.1	≤ 0.5	5 - 8	≤ 0.5	6.0+	> 300	≤ 1	95-105
ZF25	PY 119	$ZnFe_2O_4$	65+	15 - 25	4.9	≤ 0.1	≤ 0.5	5 - 8	≤ 0.5	6.0+	> 300	≤ 1	95-105
MANGANESE FERRITE BLACKS													
F9900M	PBk 26	$(Fe,Mn)_2O_3$	65+	15 - 25	5.0	≤ 0.1	≤ 0.5	5 - 8	≤ 0.5	6.0+	> 300	≤ 1	95-105
F9900MB	PBk 26	$(Fe,Mn)_2O_3$	65+	15 - 25	4.6	≤ 0.1	≤ 0.4	7 - 10	≤ 0.5	6.0+	> 300	≤ 1	95-105
F9900MS	PBk 26	$(Fe,Mn)_2O_3$	65+	15 - 25	4.6	≤ 0.1	≤ 0.4	7 - 10	≤ 0.5	6.0+	> 300	≤ 1	95-105
MANGANESE FERRITE BROWN													
F8800MS	PBr 43	$(Fe,Mn)_2O_3$	65+	~28	4.5	≤ 0.1	≤ 0.8	5.5 - 8.5	≤ 0.5	–	> 300	≤ 1	95-105
CHROME OXIDE GREENS													
GA74	PG 17	Cr_2O_3	98.5+	15 - 25	5.1	≤ 0.06	≤ 0.3	5 - 8	≤ 1	3.0+	> 300	≤ 1	95-105
GA76	PG 17	Cr_2O_3	98.5+	9 - 16	5.1	≤ 0.06	≤ 0.3	5 - 8	≤ 1	3.0+	> 300	≤ 1	95-105
GA74M	PG 17	Cr_2O_3	98.5+	15 - 25	5.0	≤ 0.005	≤ 0.3	5 - 8	≤ 1	6.0+	> 300	≤ 1	95-105
GA76M	PG 17	Cr_2O_3	98.5+	9 - 16	4.96	≤ 0.06	≤ 0.3	5 - 8	≤ 1	6.0+	> 300	≤ 1	95-105

ZF15

ZF25

F9900M

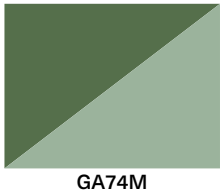
F9900MB

F9900MS

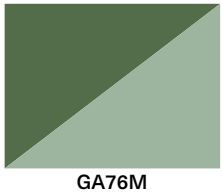
F8800MS

GA74

GA76



GA74M



GA76M

NOTE ON COLOR ACCURACY

The color chips represented here are as accurate as the printing process will allow, it may be slightly different from actual shades. This is for your reference ONLY. Please pay attention to the samples we send to you.

Color that's meant to last.

Cathay Industries is internationally recognized as a superior manufacturer of Iron Oxide and other pigments for the Coatings, Plastics, Specialities and Construction industries. Our drive to produce high-quality, unquestionably pure pigments and iron-clad customer service makes us the obvious choice.

As dependable as our iron oxide pigments.

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