



Technical Data

Synthetic Yellow Iron Oxides

Synthetic Yellow Iron Oxides from Cathay Industries are high-quality inorganic color pigments suitable for a wide range of demanding colorant applications. Typical applications include architectural paints, industrial coatings, product finishes, wood stains, plastics, rubber, ceramics, inks, paper, concrete, stucco, cement and mortar.

As with all Cathay Industries products the Synthetic Red Iron Oxides are produced to strict quality tolerances. Our products yield reliable performance properties. Our Synthetic Yellow Iron Oxide pigments offer outstanding light fastness, opacity, chemical resistance, exterior durability and compatibility.

Our "YA" grades are highly micronized to offer easy dispersion with high-speed impeller (Cowles type) milling equipment or single & twin screw extruders. Our economical "YS" and "YC" grades are suitable for use where high-energy media filled dispersion equipment such as sandmills and horizontal mills are used or in applications where high Hegman levels of dispersion are not required. All grades are tightly controlled for color and chemical properties.

TYPICAL PROPERTIES

Appearance:	Yellow Powder
Chemical Composition:	FeOOH
Particle Shape:	Acicular
Pigment Index:	Yellow 42
Color Index:	77492
CAS number:	20344-49-4
Tamped Density (g/cm ³):	0.3 – 0.6
Density (g/cm ³):	4.1
Iron as Fe ₂ O ₃ :	≥86%
Water Soluble Matter:	≤0.3%
Moisture (Wt. % @ 110°C):	≤1.0%
Typical pH:	5.0 – 8.0

The information presented in this brochure is given in good faith and is accurate to the best knowledge of Cathay Industries. Since the application process and conditions of use of our products are beyond our control, all recommendations and suggestions are made without guarantee. We make no implied warranty of merchantability, or fitness for a particular purpose. The user has an obligation to test the products to confirm their suitability for the intended use. In no event shall Cathay Industries be liable for damages of any kind arising from the use of reliance upon this information. We expressly disclaim that the use, either alone or in combination with other materials, will not violate the claims of any patent or rightful claim of any third party. Buyer's sole remedy shall be refund of pigment purchase price from point of purchase. Before using any chemical, read its label and Material Safety Data Sheet.

06/09



Technical Data Synthetic Yellow Iron Oxides

High Performance Low Viscosity Synthetic Yellow Iron Oxides:

Physical Property:	YA21LV	YA22LV	YA23LV
Avg. Particle Size (microns)	0.35	0.40	0.40
Oil Absorption (g/100g)	28-40	28-40	28-40
Hegman	6+	6+	6+

High Performance "YA" Synthetic Yellow Iron Oxides:

Physical Property:	YA21E	YA21R	YA22B	YA22E	YA22R
Avg. Particle Size (microns)	0.35	0.40	0.40	0.40	0.40
Oil Absorption (g/100g)	28-40	28-40	28-40	28-40	28-40
Hegman	6+	6+	6+	6+	6+
Physical Property:	YA23E	YA23R	YA24R	YA50E	YA60E
Avg. Particle Size (microns)	0.40	0.40	0.40	0.40	0.40
Oil Absorption (g/100g)	28-40	28-40	28-40	28-40	28-40
Hegman	6+	6+	6+	6+	6+

Standard "YS" Synthetic Yellow Iron Oxides:

Physical Property:	YS21	YS22	YS22B	YS22E	YS23	YS50
Avg. Particle Size (microns)	0.35	0.40	0.40	0.40	0.50	0.5
Oil Absorption (g/100g)	28-40	28-40	28-40	28-40	28-40	28-40

"YC" Synthetic Yellow Iron Oxides:

Physical Property:	YC23	YC23LV
Avg. Particle Size (microns)	0.50	0.50
Oil Absorption (g/100g)	28-40	28-40

The information presented in this brochure is given in good faith and is accurate to the best knowledge of Cathay Industries. Since the application process and conditions of use of our products are beyond our control, all recommendations and suggestions are made without guarantee. We make no implied warranty of merchantability, or fitness for a particular purpose. The user has an obligation to test the products to confirm their suitability for the intended use. In no event shall Cathay Industries be liable for damages of any kind arising from the use of reliance upon this information. We expressly disclaim that the use, either alone or in combination with other materials, will not violate the claims of any patent or rightful claim of any third party. Buyer's sole remedy shall be refund of pigment purchase price from point of purchase. Before using any chemical, read its label and Material Safety Data Sheet.

06/09