QuantumBase

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Transparent Iron Oxides

- ✓ **Transparent Red Iron Oxide**
- ✓ **Transparent Yellow Iron Oxide**
- ✓ **Transparent Brown Iron Oxide**
- ✓ **Black Nanoparticle Iron Oxide**

The transparent iron oxide we offer is an ultra-fine iron oxide pigment, suitable for use in the formulation of woodstains, varnishes, masterbatch or plastic colorants, artists' paints, cosmetics, and automotive paints amongst others.
These pigments offer the user a number of benefits including;

- ✓ High degree of transparency
- ✓ Attractive UV absorption characteristic
- ✓ Excellent color properties
- ✓ Weatherable
- ✓ Low in cost
- ✓

Note: These transparent iron oxides meet the USA, FDA.10,3,3 requirement for use in cosmetic products, and are suitable for use in face powders to provide UV protection from the sun and also tinting effects.

Transparent Red Iron Oxide

Physical Properties	RTP-X-9603 (Acicular)	Physical Properties	HDM-S-7041 (Acicular)
B.E.T. - m^2/g	118	B.E.T. - m^2/g	98.4
pH	5.0	pH	4.3
FeO - %	≤1.0	FeO - %	≤1.0
Bulk Density - g/mL	0.58	Bulk Density - g/mL	0.69
Tap Density - g/mL	0.81	Tap Density - g/mL	0.95
Water Soluble Salts - %	≤2.0	Water Soluble Salts - %	≤2.0
Loss on Drying - %	≤5.0	Loss on Drying - %	≤5.0
FeOOH - %	89	γFe_2O_3 - %	90.1

Transparent Yellow Iron Oxide

Physical Properties	YTP-X-9505 (Acicular)
B.E.T. - m^2/g	118
pH	5.0
FeO - %	≤1.0
Bulk Density - g/mL	0.58
Tap Density - g/mL	0.81
Water Soluble Salts - %	≤2.0
Loss on Drying - %	≤5.0
FeOOH - %	89

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Transparent Brown Iron Oxide

GTP-X-9701 (Acicular)			
Physical Properties		**Magnetic Properties**	
B.E.T. - m^2/g	45.3	**(Hc)-BH - Oe**	320
O.A, Brabender - ml/50g	35.5	**Br - Gauss**	1700
pH	5.7	**Bm - Gauss**	3650
FeO - %	≤1.0	**(iHc) - Oe**	262
Bulk Density - g/mL	0.51	**Sigma-r - emu/g**	20.3
Tap Density - g/mL	0.72	**Sigma-m - emu/g**	65.4
Water Soluble Salts - %	≤0.5		
Loss on Drying - %	≤0.5		
γFe_2O_3 - %	94.5		

Black Nanoparticle Iron Oxide

NMP-X-9002 (Acicular)			
Physical Properties		**Magnetic Properties**	
B.E.T. - m^2/g	82.0	**(Hc)-BH - Oe**	22
pH	4.0	**Br - Gauss**	250
FeO - %	≤14.0	**Bm - Gauss**	2850
Bulk Density - g/mL	0.89	**(iHc) - Oe**	ND
Tap Density - g/mL	1.17	**Sigma-r - emu/g**	ND
Water Soluble Salts - %	≤0.5	**Sigma-m - emu/g**	52
Loss on Drying - %	≤1		
γFe_2O_3 - %	87.2		
Color	Black		

(Note: The MNP range are for use in cosmetics as a UV filter)

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Physical Properties	BLP-X-8002 (Cubic)
B.E.T. - m^2/g	6.1
pH	5.0
FeO - %	25.6
Bulk Density - g/mL	0.56
Tap Density - g/mL	0.83
Water Soluble Salts - %	≤0.5
Loss on Drying - %	≤3
Fe^t,as Fe_3O_4 - %	96.5
Particle Size, μm	0.15 - 0.18
Color	Ultra Black

Note: BLP-8002 pigment is one of the blackest pigments available on the global market at the moment and is used for making mascara.

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