



COLORANA® Iron Oxide Pigments **versus** **Natural and Synthetic Iron Oxide Pigments**

Natural Iron Oxides *

- Mined and processed
- Low Fe₂O₃ content
- Higher impurities
- Low water soluble salts
- Coarse particle size, < 40 micron
- Wide grain size distribution
- Low opacity and hiding power
- Low tinting strength
- Low colour saturation
- Limited dispersibility/slow colour development
- Less consistent
- Low cost

Synthetic Iron Oxides *

- Chemically made and processed
- High Fe₂O₃ content
- Increased chemical purity
- High content of matter soluble in water
- Fine grained, < 1micron
- Narrow grain size distribution
- Higher opacity and hiding power
- High tinting strength
- High chroma colours
- Advanced dispersibility
- Consistent
- High cost

COLORANA® Advanced Natural Iron Oxides

- Mined and processed
- Higher Fe₂O₃ content
- Exceptional chemical purity
- Low water soluble salts
- Fine grained, < 1micron
- Narrow grain size distribution
- High opacity and hiding power
- High tinting strength
- High colour saturation
- Advanced dispersibility/fast colour development
- High consistency
- High cost

* By: Mr. Erwin Ratajczak, Bayer Corporation, 1997
Natural Iron Oxides – Should Going Natural Always be the Trend?
Iron Oxides 1997, San Diego, Intertech Conferences.