TECHNICAL DATA SHEET

Iron Oxide Yellow YA21

| Edition of | 2012-12-20 | | |
|-------------------|--|--|--|
| Туре | Yellow Pigment-High Performance micronised | | |
| Molecular formula | Fe2O3. H2O | | |
| Molecular weight | 177.71 | | |
| Delivery Form | Powder | | |
| Chemical Class | Synthetic Iron Oxide alpha-FeOOH | | |
| Color Index | Pigment Yellow 42(77492) | | |
| CAS No. | 20344-49-4 | | |
| Use ReCommedation | Coatings, Construction, Plastic | | |

COLOR VALUES AND TINTING STRENGTH

| Reference | | | Standard: DIN 6174 |
|---------------------------------------|---------------------|------------|--------------------|
| | <u>Min</u> | <u>Max</u> | Test Method |
| Binder | Test Paste Based On | | |
| | R-05 | | |
| Full Shade | | | No.001, 2001-01-01 |
| $\triangle L^*$ | -0.4 | 0.4 | |
| $\triangle a^*$ | -0.8 | 0.8 | |
| $	riangle b^{\star}$ | -0.9 | 0.9 | |
| ∆E*ab | | 1.0 | |
| Reduction with titanium dioxide (1:5) | R-706 | | No.038, 2009-08-01 |
| $\triangle L^*$ | -0.5 | 0.5 | |
| $\triangle a^*$ | -0.5 | 0.5 | |
| $	riangle b^{\star}$ | -0.6 | 0.6 | |
| ∆E*ab | | 0.8 | |
| Binder | R-05 | | |
| Relative tinting strength [%] | 97.0 | 103.0 | No.038, 2009-08-01 |

TECHNICAL DATA

| | <u>Min Max</u> | Test Method |
|-----------------------------------|------------------|---------------|
| Fe2O3 | 86 | DIN 55913-2 |
| Water soluble substances [%] | 0.5 | DIN ISO 787-3 |
| Moisture at 105°C [%] | 0.5 | DIN ISO 787-2 |
| Oil absorption approx [%] | 35 | DIN ISO 787-5 |
| Sieve residue on 0.045mm mesh [%] | 0.005 | DIN 53195 |
| Color compared with standard | Similar-a little | DIN 6174 |
| ΔΕ | 0.8 | DIN 6174 |

| PH Value | 4.5 | 7.0 | DIN ISO 787-9 |
|-----------------------------|------|-----|----------------|
| Loss on Heating 1000°C 1/2h | 14.0 | | DIN 55913-2 |
| Density | 4.0 |) | DIN ISO 787-10 |
| Tamped Density | 0.6 | 1 | DIN ISO 787-11 |

STANDARD PACKAGING 20kg/bag

TRANSPORT AND STORAGE

Protect against weathering. Store in a dry place and avoid extreme fluctuations in temperature. Special conditions for opened packaging: Close bags after use to prevent the absorption of moisture and contamination.

SAFETY

The product is not classified as dangerous under the relevant EC directives and corresponding national regulations valid in the individual EU member states. It is not dangerous according to transport regulations. In countries outside the EU, compliance with the respective national legislation concerning the classification, packaging, labeling and transport of dangerous substances must be ensured.

The information contained in the safety data sheet should be observed. This contains information on handing, product safety and ecology.