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NingTI



TiO<sub>2</sub>  
**TITANIUM DIOXIDE NTR-606**   
Technical Information

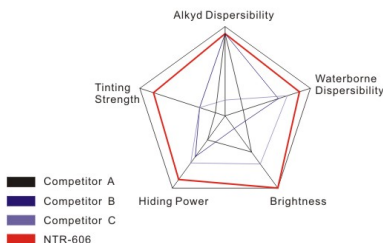
 HONGDA GROUP LIMITED  
洪大集团有限公司

## NTR-606 Titanium Dioxide - Your Best Choice

### You Best Choice

Hongda would like to introduce an improved, multi-purpose titanium dioxide for the coatings industry called NTR-606. Delivering all the benefits you are looking for. NTR-606 is the best choice for all your coating needs. The technical advantages of using Hongda Titanium Dioxide NTR 606 are listed below

#### Advantage 1: NTR-606 Delivers Total Value\*



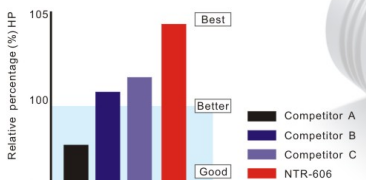
\*performance attribute scales expanded to illustrate relative pigment differences

#### Improved Hiding Power

- Better coating coverage
- Minimum TiO<sub>2</sub> use in coatings formulas

NTR-606 provides exceptional hiding power and tint strength in a wide variety of coating formulations as shown in Figure 1, our extensive testing has shown that NTR-606 consistently outperforms multi-purpose grades from global competitors. The exceptional dispersion and unique particle size distribution of NTR 606 is the key to excellent optical performance. Using NTR 606 will provide excellent coating coverage and may allow coating producers to reduce your coating raw material costs by reducing the amount of TiO<sub>2</sub> in the paint.

#### Advantage 2: NTR-606 Provides superior hiding power and lower oil absorption



\*Eight different coatings

#### Superior Dispersion

- Lower energy consumption
- Higher productivity from shorter dispersion times
- Improved product quality consistency from more consistent dispersion

#### NTR-606 also provides

- Superior tinting strength
- Bright blue shade whites

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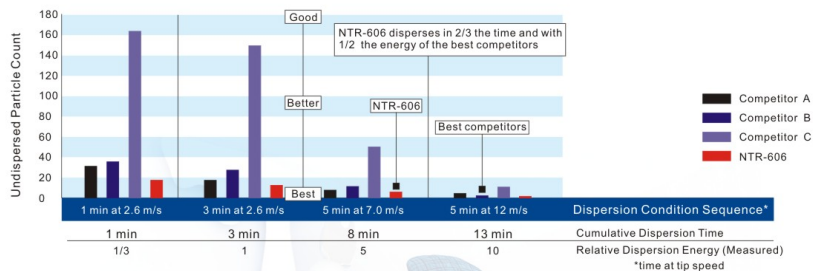
### Advantage 3: NTR-606 Disperses easily in solvent based alkyds, and has faster dispersion times in long oil alkyd formulations

Figure 3, demonstrates in alkyds, the ease of dispersion NTR 606 relative to competitive grades. It also highlights improved productivity and energy savings

and uses proprietary protocol to measure the number of undispersed particles

As alkyd dispersion time and intensity are increased the dispersion condition is evaluated using a special hegman gauge dispersion condition is analyzed using the DuPont™ Optical Counter (DOC) which takes a digital image of the drawdown

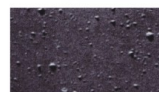
The results show wide variation in how different TiO<sub>2</sub> grades disperse following the various grind conditions. While most pigments require the highest grind intensity (5 minutes at 12 m/s) to achieve a clean dispersion (<10 undispersed particles). NTR-606 achieves complete dispersion using much less time and money



### Advantage 4: NTR-606 improves dispersion time and energy saving in water based systems.

### Advantage 5: NTR-606 disperses easily in acrylic emulsions

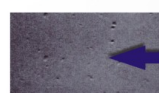
Competitor A mixed in acrylic emulsion 20 minutes at 1000 rpm



NTR-606 mixed in acrylic emulsion 20 minutes at 1000 rpm

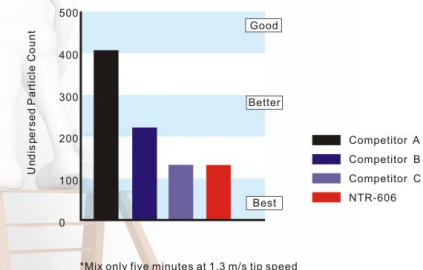


Competitor A mixed 40 minutes at 1000 rpm



NTR-606 disperses much better than competitor A with low energy mixing

Even after mixing twice as long, Competitor A still not dispersed as well as NTR-606



As well as significant technical benefits NTR 606 also provides commercial advantages comparative to other higher quality titanium dioxides used in higher specification coatings