

# **Super Dispersant D163R**

**(Similar to BYK-163)**

## **First, Summary**

D163R is a high molecular super dispersant with multiple anchoring groups. It is suitable for various systems. It has excellent wetting and dispersion ability of various organic pigments and especially carbon black pigment. It provides excellent viscosity reduction, stability and color strength for carbon black. It could greatly decrease the operating viscosity of the grinding system, increase the pigment content and has strong ability to prevent flocculation. D163R could greatly improve the storage stability of the pigment paste.

## **Second, Physical and chemical data**

Composition: high molecular polyurethane block copolymer with pigment affinity groups

Appearance: light yellow liquid

Active fraction: 45%

Solvent: xylene

## **Third, Characteristic**

It is suitable for medium and high polarity systems, has good compatibility with most of common coating resins. It could significantly improve the wetting and dispersion performance of the pigment, reduce the viscosity of the system, improve the fluidity, shorten the dispersion time and has excellent ability to prevent flocculation. In comparison with small molecular wetting dispersants, D163R could greatly improve the storage stability of the pigment paste. It is suitable for all kinds of industrial coating systems, anti-corrosion coating systems, motorcycle coating systems, etc.

## **Fourth, Application system and dosage**

It is suitable for medium and high polarity systems. The dosage is different in relation to different systems: 8% - 15% upon inorganic pigments, 30% - 85% upon organic pigments and 60% - 120% upon carbon black (depends on the specific surface area of the pigment).

## **Fifth, Usage method**

1. Add the dispersant into the medium and mix well, then add pigments and fillers for dispersion. It is suitable for all dispersion methods such as bead mill grinding, roller grinding, ball milling, etc.
2. Carbon black pigment, acetylene carbon black and high-performance organic pigments need to be pre-soaked. D163R can be dissolved, then mixed with pigments, the mixture should be stirred at high speed for 30-40 minutes and placed for 12 hours, afterwards ground to the required fineness. In this case the effect is particularly good.

## **Sixth, Packaging**

25kg or 50kg iron drum / plastic drum

Keep away from heat and fire sources, store in a ventilated and cool place at 0-40 °C and keep sealed.