

## Pigment Yellow 83

### 1. Product Information

**Product Name:** Pigment Yellow 83

**Colour Index No.:** C.I. PY83

**Chemical Name:** Diarylide Yellow HR

**Chemical Class:** Disazo Pigment (Diarylide Yellow)

**CAS No.:** [5567-15-7]

**EINECS No.:** 226-941-4

**Molecular Formula:** C<sub>36</sub> H<sub>32</sub>Cl<sub>2</sub>N<sub>8</sub> O<sub>6</sub>

**Typical Structure:** 3,3'-Dichlorobenzidine based disazo pigment

### 2. Typical Physical and Chemical Properties

Property	Specification / Description
<b>Appearance</b>	Reddish-yellow powder
<b>Hue</b>	Reddish yellow
<b>Density (g/cm<sup>3</sup>)</b>	Approx. 1.4 - 1.6
<b>Oil Absorption (g/100g)</b>	Approx. 45 - 60
<b>pH Value (10% slurry)</b>	6.5 - 8.0
<b>Lightfastness (1-8)</b>	7 (Very Good)
<b>Heat Resistance (°C)</b>	200 - 220

Property	Specification / Description
<b>Water Resistance (1-5)</b>	5 (Excellent)
<b>Oil Resistance (1-5)</b>	4 (Good)
<b>Acid Resistance (1-5)</b>	4 (Good)
<b>Alkali Resistance (1-5)</b>	3 (Moderate)

\*(Note: 1=Poor, 5=Excellent; Actual performance depends on application media and processing conditions)\*

### 3. Application Characteristics

#### Primary Applications:

**Printing Inks:** The primary application, especially in **offset printing inks**, **flexographic inks**, and **gravure inks** for high-quality packaging

**Plastics:** Suitable for **PVC**, **rubber**, and some **polyolefins** with moderate processing temperatures

**Coatings:** Used in **industrial coatings** and **architectural coatings** requiring good lightfastness

**Office Products:** Coloring of high-quality stationery items

#### Key Advantages:

Clean reddish-yellow shade

High tinting strength

Good transparency

Better lightfastness than many other diarylide yellows

Good printing performance

