

## Pigment BLUE SY-272

### 1. Product Information

**Product Name:** Pigment Blue 15:1

**Colour Index No.:** C.I. PB15:1

**Chemical Name:** Copper Phthalocyanine Blue,  $\alpha$ -stabilized form

**Chemical Class:** Phthalocyanine

**CAS No.:** [147-14-8] (same as PB15, different crystal form)

**EINECS No.:** 205-685-1

**Molecular Formula:**  $C_{32}H_{16} CuN_8$

**Typical Structure:** Copper phthalocyanine complex, partially chlorinated stabilized  $\alpha$ -form

### 2. Typical Physical and Chemical Properties

Property	Specification / Description
<b>Appearance</b>	Bright reddish-blue powder
<b>Hue</b>	Reddish blue (stabilized $\alpha$ -form)
<b>Density (g/cm<sup>3</sup>)</b>	Approx. 1.50 - 1.65
<b>Oil Absorption (g/100g)</b>	Approx. 35 - 50
<b>pH Value (10% slurry)</b>	5.5 - 7.5
<b>Lightfastness (1-8)</b>	8 (Excellent)

Property	Specification / Description
<b>Heat Resistance (°C)</b>	280 - 300
<b>Water Resistance (1-5)</b>	5 (Excellent)
<b>Oil Resistance (1-5)</b>	5 (Excellent)
<b>Acid Resistance (1-5)</b>	5 (Excellent)
<b>Alkali Resistance (1-5)</b>	5 (Excellent)

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

### 3. Application Characteristics

#### Primary Applications:

**Paints & Coatings:** Industrial coatings, automotive coatings, powder coatings

**Plastics:** PVC, polyolefins, engineering plastics

**Printing Inks:** Offset inks, gravure inks, flexographic inks

**Specialty Applications:** Artists' colors, textile printing

#### Key Advantages:

**Stabilized  $\alpha$ -form** - resistant to crystal growth and flocculation

Excellent lightfastness and weather resistance

Good heat stability

Superior chemical resistance

High tinting strength

Good rheological properties