

## Pigment BLUE SY-270

### 1. Product Information

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

**Chemical Name:** Copper Phthalocyanine Blue

**Chemical Class:** Phthalocyanine

**CAS No.:** [147-14-8]

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

**Molecular Formula:** C<sub>32</sub>H<sub>16</sub> CuN<sub>8</sub>

**Typical Structure:** Copper phthalocyanine complex

### 2. Typical Physical and Chemical Properties

Property	Specification / Description
<b>Appearance</b>	Dark blue powder
<b>Hue</b>	Reddish blue ( $\alpha$ -form)
<b>Density (g/cm<sup>3</sup>)</b>	Approx. 1.50 - 1.65
<b>Oil Absorption (g/100g)</b>	Approx. 35 - 45
<b>pH Value (10% slurry)</b>	5.5 - 7.5
<b>Lightfastness (1-8)</b>	8 (Excellent)
<b>Heat Resistance (°C)</b>	300+
<b>Water Resistance (1-5)</b>	5 (Excellent)
<b>Oil Resistance (1-5)</b>	5 (Excellent)

Property	Specification / Description
<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 crystal form and application conditions)\*

### 3. Application Characteristics

#### Primary Applications:

**Paints & Coatings:** All types of industrial coatings, automotive coatings, and architectural paints

**Plastics:** All major polymers including polyolefins, PVC, engineering plastics

**Printing Inks:** All printing processes including offset, gravure, flexographic, and screen inks

**Textiles:** Pigment printing and mass coloration

**Specialty Applications:** Artists' colors, cosmetics, and other specialty uses

#### Key Advantages:

Outstanding lightfastness and weather resistance

Excellent heat stability

Superior chemical resistance

High tinting strength

Cost-effective

Environmentally friendly