

## Pigment YELLOW SY-241

### 1. Product Information

**Product Name:** Pigment Yellow 1

**Colour Index No.:** C.I. PY1

**Chemical Name:** Acetoacetanilide arylide yellow

**Chemical Class:** Monoazo Pigment (Acetoacetarylde)

**CAS No.:** [2512-29-0]

**EINECS No.:** 219-730-8

**Molecular Formula:** C<sub>17</sub> H<sub>16</sub> N<sub>4</sub>O<sub>4</sub>

**Typical Structure:** Acetoacetanilide-based monoazo pigment

### 2. Typical Physical and Chemical Properties

Property	Specification / Description
<b>Appearance</b>	Greenish-yellow powder
<b>Hue</b>	Greenish yellow
<b>Density (g/cm<sup>3</sup>)</b>	Approx. 1.4 - 1.6
<b>Oil Absorption (g/100g)</b>	Approx. 40 - 55
<b>pH Value (10% slurry)</b>	6.5 - 8.0

Property	Specification / Description
<b>Lightfastness (1-8)</b>	5-6 (Moderate to Good)
<b>Heat Resistance (°C)</b>	140 - 160
<b>Water Resistance (1-5)</b>	4-5 (Good to Excellent)
<b>Oil Resistance (1-5)</b>	4 (Good)
<b>Acid Resistance (1-5)</b>	3-4 (Moderate to 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:** One of the primary applications, especially in **packaging inks**, **flexographic inks**, and **gravure inks**.

**Coatings:** Used in **air-dry coatings** and **industrial finishes** where high lightfastness is not critical.

**Plastics:** Limited use in **PVC** and other low-temperature processing plastics.

**Office Products:** Suitable for coloring **wax crayons, pencils**, and other stationery items.

**Key Advantages:**

Bright greenish-yellow shade

Good tinting strength

Cost-effective

Good transparency in printing inks

Easy to disperse