

Pigment YELLOW SY-257

1. Product Information

Colour Index No.: C.I. PY81

Chemical Name: Monoazo Yellow

Chemical Class: Monoazo Pigment (Benzimidazolone)

CAS No.: [22094-93-5]

EINECS No.: 244-776-4

Molecular Formula: C₁₈ H₁₅ Cl₂N₅ O₃

Typical Structure: Benzimidazolone-based monoazo pigment

2. Typical Physical and Chemical Properties

| Property | Specification / Description |
|-----------------------------------|------------------------------|
| Appearance | Greenish-yellow powder |
| Hue | Greenish yellow |
| Density (g/cm³) | Approx. 1.5 - 1.7 |
| Oil Absorption (g/100g) | Approx. 45 - 65 |
| pH Value (10% slurry) | 6.5 - 8.0 |
| Lightfastness (1-8) | 7-8 (Very Good to Excellent) |
| Heat Resistance (°C) | 200 - 220 |

| Property | Specification / Description |
|--------------------------------|-----------------------------|
| Water Resistance (1-5) | 5 (Excellent) |
| Oil Resistance (1-5) | 5 (Excellent) |
| Acid Resistance (1-5) | 4-5 (Good to Excellent) |
| Alkali Resistance (1-5) | 4 (Good) |

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

3. Application Characteristics

Primary Applications:

Plastics Coloring: Excellent performance in **engineering plastics** (ABS, PC, PS, PMMA), **polyolefins** (PP, PE), and **PVC**

Coatings: High-quality **industrial coatings**, **automotive coatings**, and **powder coatings**

Printing Inks: Used in high-performance printing inks requiring good fastness properties

Artistic Colors: High-grade artists' paints

Key Advantages:

Excellent heat resistance

Very good lightfastness and weather resistance

Good chemical resistance

Good migration fastness

Suitable for high-temperature processing