

Pigment Yellow 12

1. Product Information

Colour Index No.: C.I. PY12

Chemical Name: Diarylide Yellow AAA

Chemical Class: Disazo Pigment (Diarylide Yellow)

CAS No.: [6358-85-6]

EINECS No.: 228-787-8

Molecular Formula: $C_{32}H_{26}Cl_2N_6O_4$

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

2. Typical Physical and Chemical Properties

Property	Specification / Description
Appearance	Greenish-yellow powder
Hue	Greenish yellow
Density (g/cm³)	Approx. 1.4 - 1.6
Oil Absorption (g/100g)	Approx. 45 - 60
pH Value (10% slurry)	6.5 - 8.0
Lightfastness (1-8)	5-6 (Moderate to Good)
Heat Resistance (°C)	160 - 180
Water Resistance (1-5)	5 (Excellent)

Property	Specification / Description
Oil Resistance (1-5)	4 (Good)
Acid Resistance (1-5)	4 (Good)
Alkali Resistance (1-5)	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 packaging

Plastics: Used in **PVC**, **rubber**, and other polymers processed at moderate temperatures

Coatings: Limited to indoor applications due to moderate lightfastness

Office Products: Suitable for coloring stationery items

Key Advantages:

Clean, bright greenish-yellow shade

High tinting strength

Good transparency

Cost-effective

Good printability

