

Pigment Violet 1

1. Product Information

Product Name: Pigment Violet 1

Colour Index No.: C.I. PV1

Chemical Name: Triarylmethane Violet

Chemical Class: Triarylmethane Lake Pigment

CAS No.: [1326-03-0]

EINECS No.: 215-052-9

Molecular Formula: Composition varies with substrate and laking agent

Typical Composition: Complex of basic violet dye with inorganic substrates
(phosphotungstic acid, phosphomolybdic acid, alumina, etc.)

2. Typical Physical and Chemical Properties

| Property | Specification / Description |
|-----------------------------------|---|
| Appearance | Bright violet powder |
| Hue | Bluish violet |
| Density (g/cm³) | Approx. 1.8 - 2.3 (varies with substrate) |
| Oil Absorption (g/100g) | Approx. 40 - 60 |
| pH Value (10% slurry) | 5.5 - 7.5 |
| Lightfastness (1-8) | 2-3 (Poor) |

| Property | Specification / Description |
|--------------------------------|-----------------------------|
| Heat Resistance (°C) | 120 - 140 |
| Water Resistance (1-5) | 3-4 (Moderate to Good) |
| Oil Resistance (1-5) | 3 (Moderate) |
| Acid Resistance (1-5) | 2 (Poor) |
| Alkali Resistance (1-5) | 2 (Poor) |

(Note: 1=Poor, 5=Excellent; Performance varies significantly with the specific laking agent and substrate used)

3. Application Characteristics

Primary Applications:

Printing Inks: Main application in **packaging inks**, **flexographic inks**, and **gravure inks** where high brightness is required

Office Products: Coloring of **ballpoint pen inks**, **stamp pad inks**, and **typewriter ribbons**

Coatings: Limited to indoor decorative applications

Plastics: Very limited use due to poor heat resistance

Specialty Applications: Security printing, artists' materials

Key Advantages:

Very bright and intense violet shade

High tinting strength

Good transparency

Technical Data Sheet

Cost-effective for applications not requiring high fastness

Excellent color purity