Pigment Violet 3

1. Product Information

Product Name: Pigment Violet 3

Colour Index No.: C.I. PV3

Chemical Name: Rhodamine B Lake

Chemical Class: Xanthene Lake Pigment

CAS No.: [1325-82-2]

EINECS No.: 215-444-0

Molecular Formula: Varies with substrate and laking agent

Typical Composition: Complex of Rhodamine B dye with inorganic substrates (tungstomolybdophosphoric acid, alumina, etc.)

2. Typical Physical and Chemical Properties

Property	Specification / Description
Appearance	Bright bluish-violet powder
Hue	Bluish violet (exhibits fluorescence)
Density (g/cm³)	Approx. 1.8 - 2.4 (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: Used 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, cosmetics

Key Advantages:

Very bright and intense violet shade with fluorescence

High tinting strength

Good transparency

Cost-effective for applications not requiring high fastness