C.I. PR48:2

1. Product Information

Colour Index No.: C.I. PR48:2

Chemical Name: 2B Lake Red, Calcium Salt Lake

Chemical Class: Azo Lake Pigment

CAS No.: [7023-61-2]

EINECS No.: [230-299-1]

Molecular Formula: $C_{18}H_{12}CaCl_2N_2O_6S$

Typical Structure: Based on

2-[(2-Hydroxy-1-naphthyl)azo]-4-chloro-5-methylbenzenesulfonic acid, calcium salt

2. Typical Physical and Chemical Properties

Property	Specification / Description
Appearance	Bright medium-red powder
Hue	Bluer and brighter than PR48:1 (Barium Lake)
Density (g/cm^3)	Approx. 1.5 - 1.8
Oil Absorption (g/100g)	Approx. 40 - 60

Property	Specification / Description
pH Value (10% slurry)	6.0 - 8.0
Lightfastness (1-8)	4-5 (Moderate to Good)
Heat Resistance (°C)	160 - 180 (short-term)
Water Resistance (1-5)	5 (Excellent)
Oil Resistance (1-5)	4 (Good)
Acid Resistance (1-5)	3 (Moderate)
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:

Plastics Coloring: Very widely used, especially in **Polyvinyl Chloride (PVC)** and **Polyolefins (PP, PE)**. It offers excellent color value, good dispersibility, and is a cost-effective bright red. Also used in rubber and polyurethane (PU).

Inks: A primary red for **flexographic and gravure printing inks**, particularly for packaging. Its brightness and strength are valued.

Coatings: Used in industrial and decorative paints where very high lightfastness is not critical.

Synthetic Fibers: Used in the mass pigmentation of fibers.

Key Advantages:

Bright, bluish-red shade.

High tinting strength.

Good dispersibility.

Cost-effective.

Limitations: Moderate lightfastness limits use in high-performance outdoor applications.Moderate resistance to acids and alkalis.