

Ponceau 4R 2286

Water Soluble Dye

Depth of Shade Progression

Note: Approximate color for aqueous applications in clear solutions*.



Physical & Chemical Properties

Chemical nature: water soluble monoazo dye

Chemical formula: $C_{20}H_{11}N_2Na_3O_{10}S_3$

Molecular weight: 604.5

Pure dye content: 82-85% w/w

Ionic nature: anionic

Form: powder

Bulk density: variable, typically 0.55 - 0.75 g/cm³

Wavelength of max absorption: 506 nm (water)

pKa value(s): 11.2

Molar absorptivity constant, ϵ : 17,100 L mol⁻¹ cm⁻¹ ($\lambda=505nm$)

Solubility (20°C) Water: 200 g/l, DMSO: 84 g/l

Ethanol: 0.9 g/l, EGME: 80 g/l

Hue: Bright Scarlet Red at heavy shades, pink at light shades

Light fastness: ISO: 4, AATCC: 4 (1=poor, 8=excellent)

Recommended pH range is 2.5 - 9.5

Storage & Handling

Store in a closed container in a dry environment.

Handle carefully to avoid creating dust. Consult SDS before use.

Shelf Life: 5 years.

GHS Classification

Hazard Statements: (OSHA)

OSHA003 May form combustible dust concentrations in air.

GHS Signal Word: Warning

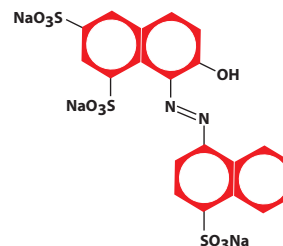
Pictogram(s) : None required

Transportation

Shipping: Not regulated by US DOT/IATA . Contains no dangerous goods.

Identification

Color Index (CI) Generic Name:	Acid Red 18
Alternate CI Generic Name	Food Red 7
Color Index Constitution Number:	16255
CAS Number	2611-82-7
EC (EINECS) Number	220-036-2
RTECS Number	QJ6530000
PubChem CID:	17466
HS Code:	3204.12
Synonyms: Cochineal Red A, Scarlet 3R, New Coccine I	
UPAC Name: Trisodium;7-hydroxy-8-[(4-sulfonatophthalen-1-yl)diazenyl]naphthalene-1,3-disulfonate	



Packaging

1-lb jars(12/cs)
5-lb jars (4/cs)
25-lb pails
100-lb drums
Custom sizes available

Common Applications

Industrial & Institutional Cleaners
Inks and Markers
Chemical Compounding
Home Care Products
Textiles (wool, polyamide)
Systemic Floral Dye
Paper

Typical Use Rates

Coloring Liquid Products: This dye can be added at varying concentrations to produce shades ranging from light to strong. The following use rates represent typical concentrations when coloring liquid products:

Light shade:	8 ppm	(1-lb per 15,000 gallons)
Medium Shade:	20 ppm	(1-lb per 6,000 gallons)
Heavy Shade:	40ppm	(1-lb per 3,000 gallons)

Coloring Marker Inks: 3-6% w/w

Textiles and Paper

Light	0.1 %w/w	(1-lb per 500 lbs of fiber)
Medium	1.0 %w/w	(1-lb per 100 lbs of fiber)
Strong	2.0 %w/w	(1-lb per 50-lbs of fiber)

* Disclaimer: Color shown is a CMYK approximation only. Actual color may vary depending upon concentration and the nature of the product to which this dye is applied. It is essential that thorough testing be completed on a sample basis before proceeding to use this dye on a production level. To our best knowledge, the information and recommendations contained herein are accurate and reliable. However, this information and our recommendations are furnished without warranty, representation, inducement, or license of any kind, including, but not limited to, the implied warranties of merchantability and fitness for a particular use or purpose. Customers are encouraged to conduct their own tests and to read the available product literature carefully before using this product.