



Safranin O

Biological stain,

Common biological dye Safranin O Powder is frequently used for staining in histology and microbiology. Safranin O Powder is used by microbiologists to stain bacterial cells, making it easier to distinguish between Gram-positive and Gram-negative bacteria based on the properties of their cell walls. Gram-negative bacteria lose the stain and turn red or pink after counterstaining, but Gram-positive bacteria keep the stain and appear purple.

In histology, safranin O powder is a key staining agent, especially for identifying cartilage and cell nuclei in histological samples. This staining method allows pathologists and researchers to see cellular characteristics and analyze tissue architecture.

Safranin O powder's application in leather and textile dyeing, which transcends the domains of histology and microbiology, demonstrates its adaptability.

Cat. Number	ASC-1011
CAS Number	477-73-6
MDL Number	MFCD00011759
Color Index	50240
PubChem	310279833
Molecular Weight	350.85 gr/mol
Molecular Formula	C ₂₀ H ₁₉ ClN ₄
Storage Temperature	20 °C / Keep away from oxidizing agents.
Form and Color	Crystall / Red-brown to dark brown
Purity	≥ 95 %
Solution Appearance	0.1% in 50% EtOH: Red to dark red, clear solution
Solubility	Soluble in water 50 gr/L Soluble in alcohol
Wavelength of Maximum Absorption (λ max)	530 - 534 nm (in 50% EtOH)
Specific Absorption	≥ 1500 (λ max, in 50% EtOH)
Loss on Drying	≤ 8 %



Synonym

Basic Red2 / Cotton Red / Gossypimine / Safranin
Y or A / 3,7-Diamino-2,8-dimethyl-5-
phenylphenazinium chloride / Safranine T