

Specification

Neutral red (C.I. 50040)

A0683

Synonym	Basic Red 5, Toluylene red
Transition interval	pH 6.8 - 8.0 (violet - orange)
Melting point	290°C
Formula	C ₁₅ H ₁₇ ClN ₄
M	288.78 g/mol
CAS-No.:	553-24-2
HS-No.:	32041300
EC-No.:	209-035-8
Storage:	RT
LGK:	10 - 13
Disposal:	3
WGK:	1
Specification	
Assay (photometr.)	min. 75 %
λ_{max.} (50 % EtOH)	539 - 544 nm
E 1 %/1 cm, λ_{max.}	1130 - 1525
Loss on drying	max. 18 %
Literature	
(1) Ausubel, F.A., Brent, R., Kingston, R.E., Moore, D.D., Seidman, J.G., Smith, J.A. & Struhl, K. (eds.) (1995) <i>Current Protocols in Molecular Biology</i> , Page 16.17.9-12 (Suppl. 43) Greene Publishing & Wiley-Interscience, New York.	
Comment	
The vaccinia-virus system is widely used to overexpress recombinant proteins. To identify virus-infected cells, living cells are stained with neutral red. Infected cells appear rounded, while dead cells appear as colorless "plaques" (1). Neutral red readily passes through many membranes. The cells are stained with 0.1 mg/ml neutral red (stock solution 10 mg/ml in water).	