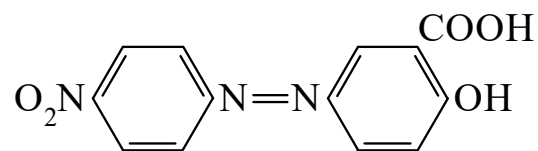




>>Entry Name: Alizarine chrome orange G

Synonym(s): 2-Hydroxy-5-[(4-nitrophenyl)azo]benzoic acid, 9Cl. 5-[(*p*-Nitrophenyl)azo]salicylic acid. 4'-Nitro-4-oxyazobenzene-3-carboxylic acid. Alizarine orange 2GN. C.I. Mordant orange 1. Azochromol orange R. Brasilon chrome orange R. Kenachrome orange. C.I. 14030. Many other names



CAS Registry Number: 2243-76-7

Molecular Formula: C₁₃H₉N₃O₅

Molecular Weight: 287.231

Accurate Mass: 287.054222

Percentage Composition: C 54.36%; H 3.16%; N 14.63%; O 27.85%

General Statement: Strictly the name Alizarine chrome orange G applies to the sodium salt

Other Data: Available as acid or monosodium salt

Aldrich: 19507-3

Fluka: 5580

>>Derivative: Na salt

CAS Registry Number: 1718-34-9

Use/Importance: Used as 0.1% aq. soln. as acid-base indicator, (pH range 10.1-12.1; colour change yellow→brown-red)

Physical Description: Brown-yellow needles

Melting Point: Mp 253-257 dec.°

Solubility: Sol. EtOH, H₂O; spar. sol. Me₂CO; insol. CHCl₃, C₆H₆

pKa Value: pK_a 11.05

Sigma: A4146

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, 2, 972B, (ir)

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Bishop, E., *Indicators*, Pergamon, Oxford, 1972

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold, 1992, NEY000*