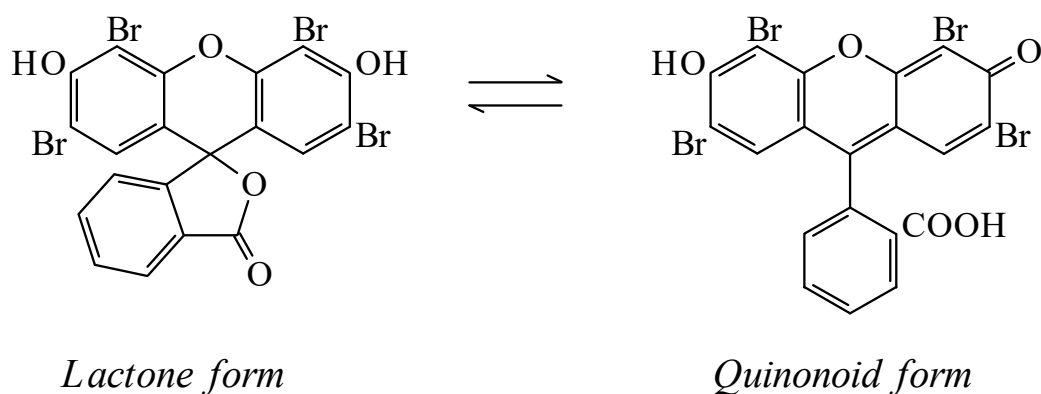




>>Entry Name: Eosine

Synonym(s): 2',4',5',7'-Tetrabromo-3',6'-dihydroxyspiro[isobenzofuran-1(3*H*),9'-[9*H*]xanthen]-3-one, 9Cl. 2',4',5',7'-Tetrabromofluorescein, 8Cl. C.I. Solvent red 43. C.I. Acid red 87. C.I. 45380



CAS Registry Number: 15086-94-9

Related CAS Registry Numbers(s): 1326-05-2 6359-05-3 21514-87-4

Molecular Formula: C₂₀H₈Br₄O₅

Molecular Weight: 647.896

Accurate Mass: 643.790519

Percentage Composition: C 37.08%; H 1.24%; Br 49.33%; O 12.35%

General Statement: Strictly, the name Eosine applies to the disodium salt

Aldrich: 23025-1

Sigma: E4385

>>Derivative: Di-Na salt

Synonym(s): Eosin YS

CAS Registry Number: 17372-87-1

Extra CAS Registry Numbers(s): 548-26-5

Type of Compound Code(s): PA3900 PS7480 PA5010 PS8250 PS8300

Use/Importance: Fluorescent dye used in biochemistry etc. Used for extraction-photometric and fluorimetric detn. of many metals, e.g. Co, Pb, Hg, Ag, Zn; titrimetric detn. of Br⁽⁻⁾, I⁽⁻⁾

Physical Description: Red cryst. with bluish tinge, or brownish-red powder

Solubility: Sol. H₂O; sl. sol. EtOH; insol. Et₂O

Hazard & Toxicity: LD₅₀ (mus, orl) 2344 mg/kg

Aldrich: 31890-6

Fluka: 45242

Sigma: E9506

>>Variant: Quinonoid-form

Molecular Formula: C₂₀H₈Br₄O₅

Molecular Weight: 647.896

Accurate Mass: 643.790519

Percentage Composition: C 37.08%; H 1.24%; Br 49.33%; O 12.35%

>>Derivative: Et ester

Synonym(s): Ethyl 2-(2,4,5,7-tetrabromo-6-hydroxy-3-oxo-3*H*-xanthen-9-yl)benzoate, 9Cl. C.I. Solvent red 45. C.I. 45386

CAS Registry Number: 26799-78-0

Type of Compound Code(s): PS8300 PA3350 PM6900

Molecular Formula: C₂₂H₁₂Br₄O₅

Molecular Weight: 675.95

Accurate Mass: 671.821819

Percentage Composition: C 39.09%; H 1.79%; Br 47.28%; O 11.83%

Use/Importance: Used as 0.5*mM* soln. of K salt in 80% EtOH for photometric detn. of Pt(IV) ($\lambda_{\max}$ 555 nm, ϵ 80000)

Physical Description: Violet cryst. powder (as K salt)

Solubility: Sl. sol. EtOH, hot water

References: