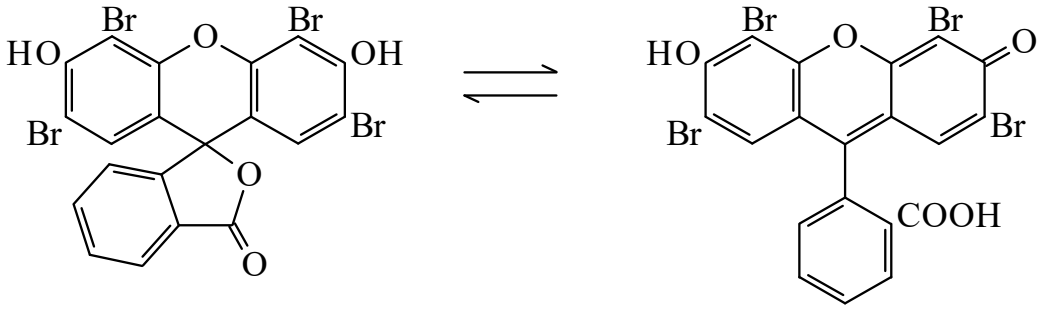
>>**Entry Name: Eosine**
Synonym(s): 2',4',5',7'-Tetrabromo-3',6'-dihydroxyspiro[isobenzofuran-1(3*H*),9'-[9*H*]xanthen]-3-one, 9Cl. 2',4',5',7'-Tetrabromofluorescein, 8Cl. C.I. Solvent red 43. C.I. Acid red 87. C.I. 45380



Lactone form *Quinonoid form*

CAS Registry Number: 15086-94-9
Related CAS Registry Numbers(s): 1326-05-2 6359-05-3 21514-87-4

Molecular Formula: $C_{20}H_8Br_4O_5$
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. H_2O; sl. sol. EtOH; insol. Et_2O
Hazard & Toxicity: LD_{50} (mus, orl) 2344 mg/kg

Aldrich: 31890-6
Fluka: 45242
Sigma: E9506

>>**Variant:** Quinonoid-form

Molecular Formula: $C_{20}H_8Br_4O_5$
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: $C_{22}H_{12}Br_4O_5$
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 0.5m*M* soln. of K salt in 80% EtOH for photometric detn. of Pt(*IV*) (λ_{max} 555 nm, ε 80000)
Physical Description: Violet cryst. powder (as K salt)
Solubility: Sl. sol. EtOH, hot water

References: