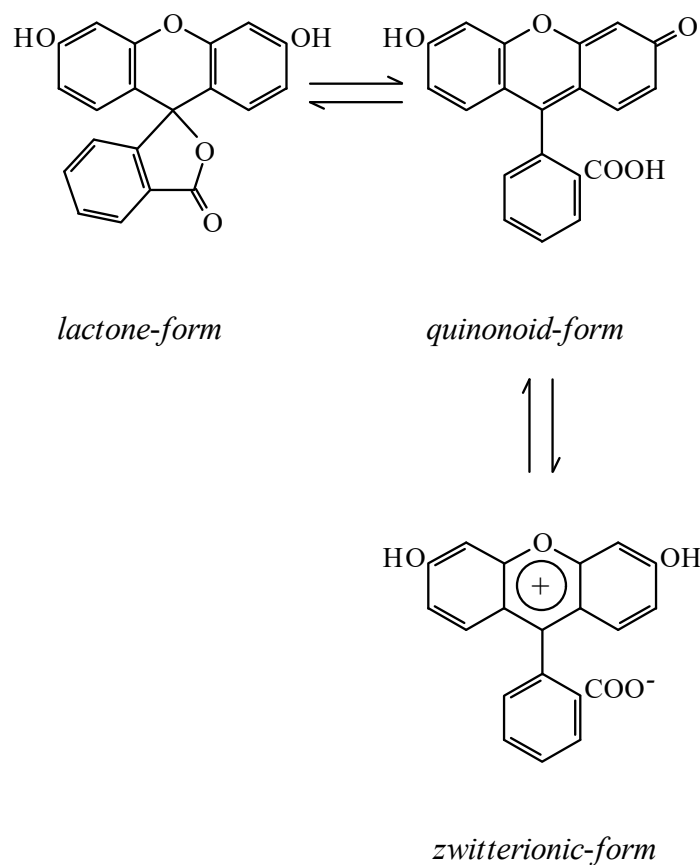




>>Entry Name: **Fluorescein**, 8Cl, BAN

Synonym(s): 3',6'-Dihydroxyspiro[isobenzofuran-1(3*H*),9'-[9*H*]-xanthen]-3-one, 9Cl. 9-(*o*-Carboxyphenyl)-6-hydroxy-3*H*-xanthen-3-one. Uranin. Resorcinolphthalein. C.I. Solvent yellow 94. 2-(6-Hydroxy-3-oxo-3*H*-xanthen-9-yl)benzoic acid, 9Cl



CAS Registry Number: 2321-07-5

Molecular Formula: C₂₀H₁₂O₅

Molecular Weight: 332.312

Accurate Mass: 332.068475

Percentage Composition: C 72.29%; H 3.64%; O 24.07%

General Statement: Probably exists in three forms, lactone (colourless), zwitterion (yellow) and quinonoid (red). These assignments supported by the recent (1997) X-ray crystal structure determination of the red form. Some derivs., e.g. monoalkyl ethers, may also be tautomeric

Use/Importance: Fluorescent dye with numerous applications, e.g. as water-flow tracer and in cosmetics. Used as an adsorption indicator in the titration of Cl⁽⁻⁾, Br⁽⁻⁾, I⁽⁻⁾, SCN⁽⁻⁾ and as a fluorescence acid-base indicator (pH range 4.0-4.5 → 6.0; colour change pink/green → green). Used for photometric detn. of I₂

Aldrich: F245-6

Fluka: 46955

Sigma: F7505

>>Derivative: Di-Na salt

Synonym(s): **Fluorescein sodium**, BAN, USAN. Fundusein. C.I. Acid yellow 73. C.I. 45350. Many other names

CAS Registry Number: 518-47-8

Use/Importance: Diagnostic aid (corneal trauma indicator). Fluorescent labelling reagent for proteins

Physical Description: Hygroscopic orange powder

Other Data: Component of Fluress. Also used as didodecanoyl ester (Fluorescein dilaurate, BAN)

Hazard & Toxicity: Can stain skin, clothing, and soft contact lenses on contact. LD₅₀ (rat, orl) 6721 mg/kg

Aldrich: 16630-8

Fluka: 46970

Sigma: F7137