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Rose Bengal Sodium

(Disodium Salt of 4,5,6,7-Tetrachloro-2',4',5',7'-tetraiodofluorescein), $C_{20}H_2Cl_4I_4Na_2O_5$ 1017.64 CAS RN[®]: 632-69-9.—Fine, rose-colored crystals or crystalline powder. Soluble in water.

[NOTE—Render commercially available material suitably pure by the following treatment. Dissolve 8 g in 200 mL of water, and adjust to a pH between 10 and 11, using short-range pH indicator paper. Add 200 mL of acetone, while stirring gently, then add dilute hydrochloric acid (1 in 10), while continuing to stir, until the pH of the solution reaches 4.0. Add 400 mL more of water, with stirring, and continue the stirring for 5 minutes. Filter the crystals on a filtering funnel, and return the crystals to the beaker used for crystallization. Recrystallize three more times in the same manner, and dry the crystals at 110° for 12 hours. Store in an amber bottle in a refrigerator at a temperature between 2° and 8°. Prepare this reagent fresh monthly.]

Chromatographic Purity: Dissolve 100 mg of rose bengal sodium, prepared as described above, in 100 mL of water, and apply 10 µL of the solution on suitable chromatographic paper. Develop the chromatogram by ascending chromatography, using a mixture of 1 part of dilute alcohol (1 in 4) and 1 part of dilute stronger ammonia water (1 in 12). Examine the chromatogram in daylight and under UV light (360 nm): no colored or fluorescent spot is visible other than the rose bengal sodium spot.

[NOTE—A suitable grade is available commercially as “Silica Gel H.”]

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
ROSE BENGAL SODIUM	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:

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