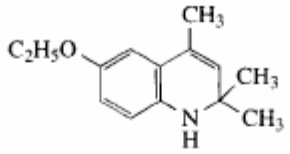
Ethoxyquin

6-Ethoxy-1,2-dihydro-2,2,4-trimethylquinoline



$C_{14}H_{19}NO$ Formula wt, monomer 217.31

INS: 324 CAS: [91-53-2]

DESCRIPTION

Ethoxyquin is a mixture consisting predominantly of the monomer ($C_{14}H_{19}NO$). It occurs as a clear liquid that may darken with age without affecting its antioxidant activity. Its specific gravity is about 1.02, and its refractive index is about 1.57.

Functional Use in Foods Antioxidant.

REQUIREMENTS

Identification A solution of 1 mg of the sample in 10 mL of acetonitrile exhibits a strong fluorescence when viewed under short-wavelength ultraviolet light.
Assay Not less than 90.0% of $C_{14}H_{19}NO$.
Heavy Metals (as Pb) Not more than 10 mg/kg.

TESTS

Assay Transfer about 200 mg of the sample, accurately weighed, into a 150-mL beaker containing 50 mL of glacial acetic acid, and immediately titrate with 0.1 *N* perchloric acid in glacial acetic acid, determining the endpoint potentiometrically. Perform a blank determination and make any necessary correction (see *General Provisions*). Each mL of 0.1 *N* perchloric acid is equivalent to 21.73 mg of $C_{14}H_{19}NO$ (monomer).
Heavy Metals Prepare and test a 2-g sample as directed in *Method II* under the *Heavy Metals Test*, Appendix IIIB, using 20 µg of lead ion (Pb) in the control (*Solution A*).

Packaging and Storage Store in tightly closed carbon steel or black iron (not rubber, neoprene, or nylon) containers in a cool, dark place. Prolonged exposure to sunlight causes polymerization.