

of tipegidine is about 7 minutes.

System suitability—

System performance: When the procedure is run with 20 μL of the standard solution under the above operating conditions, tipegidine and the internal standard are eluted in this order with the resolution between these peaks being not less than 10.

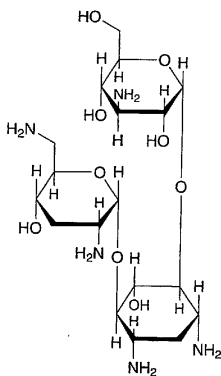
System repeatability: When the test is repeated 6 times with 20 μL of the standard solution under the above operating conditions, the relative standard deviation of the ratios of the peak area of tipegidine to that of the internal standard is not more than 1.0%.

Containers and storage Containers—Tight containers.

Storage—Light-resistant.

Tobramycin

トブラマイシン



$\text{C}_{18}\text{H}_{37}\text{N}_5\text{O}_9$; 467.51

O-3-Amino-3-deoxy- α -D-glucopyranosyl-(1 \rightarrow 6)-*O*-[2,6-diamino-2,3,6-trideoxy- α -D-ribo-hexopyranosyl-(1 \rightarrow 4)]-2-deoxy-D-streptamine [32986-56-4]

Tobramycin conforms to the requirements of Tobramycin in the Minimum Requirements for Antibiotic Products of Japan.

Description Tobramycin occurs as a white to pale yellowish white powder.

It is very soluble in water, slightly soluble in methanol, very slightly soluble in ethanol (95), and practically insoluble in diethyl ether.

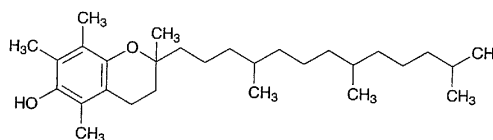
It is hygroscopic.

Tocopherol

Vitamin E

dl- α -Tocopherol

トコフェロール



$\text{C}_{29}\text{H}_{50}\text{O}_2$; 430.71

2,5,7,8-Tetramethyl-2-(4,8,12-trimethyltridecyl)chroman-6-ol [10191-41-0]

Tocopherol contains not less than 96.0% and not more than 102.0% of $\text{C}_{29}\text{H}_{50}\text{O}_2$.

Description Tocopherol is a clear, yellow to red-brown, viscous liquid. It is odorless.

It is miscible with ethanol (99.5), with acetone, with diethyl ether, with chloroform and with vegetable oils.

It is freely soluble in ethanol (95), and practically insoluble in water.

It is optically inactive.

It is oxidized by air and light, and acquires a dark red color.

Identification (1) Dissolve 0.01 g of Tocopherol in 10 mL of ethanol (99.5), add 2 mL of nitric acid, and heat at 75°C for 15 minutes: a red to orange color develops.

(2) Determine the infrared absorption spectrum of Tocopherol as directed in the liquid film method under the Infrared Spectrophotometry, and compare the spectrum with the Reference Spectrum or the spectrum of Tocopherol Reference Standard: both spectra exhibit similar intensities of absorption at the same wave numbers.

Absorbance $E_{1\text{cm}}^{1\%}$ (292 nm): 71.0 – 76.0 (0.01 g, ethanol (99.5), 200 mL).

Refractive index n_D^{20} : 1.503 – 1.507

Specific gravity d_{20}^{20} : 0.947 – 0.955

Purity (1) Clarity and color of solution—Dissolve 0.10 g of Tocopherol in 10 mL of ethanol (99.5): the solution is clear and has no more color than Matching Fluid C.

(2) Heavy metals—Proceed with 1.0 g of Tocopherol according to Method 4, and perform the test. Prepare the control solution with 2.0 mL of Standard Lead Solution (not more than 20 ppm).

Assay Dissolve about 0.05 g each of Tocopherol and Tocopherol Reference Standard, accurately weighed, in ethanol (99.5) to make exactly 50 mL, and use these solutions as the sample solution and the standard solution. Pipet 20 μL each of these solutions, and perform the test as directed under the Liquid Chromatography according to the following conditions, and determine the peak heights, H_T and H_S , of tocopherol in the sample solution and the standard solution.