Residue on ignition Not more than 0.10% (1 g).

Assay Weigh accurately about 0.6 g of Dipyridamole, previously dried, dissolve in 70 mL of methanol, and titrate with 0.1 mol/L perchloric acid VS (potentiometric titration). Perform a blank determination, and make any necessary correction.

Each mL of 0.1 mol/L perchloric acid VS = 50.46 mg of C₂₄H₄₀N₈O₄

Containers and storage Containers—Well-closed containers

Storage—Light-resistant.

Disopyramide

ジソピラミド

C₂₁H₂₉N₃O: 339.47 (*RS*)-4-Diisopropylamino-2-phenyl-2-(pyridin-2-yl)butanamide [*3737-09-5*]

Disopyramide contains not less than 98.5% of $C_{21}H_{29}N_3O$, calculated on the dried basis.

Description Disopyramide occurs as white crystals or crystalline powder.

It is very soluble in methanol and in ethanol (95), freely soluble in acetic anhydride, in acetic acid (100) and in diethyl ether, and slightly soluble in water.

Identification (1) To 1 mL of a solution of Disopyramide in ethanol (95) (1 in 20) add 10 mL of 2,4,6-trinitrophenol TS, and warm: a yellow precipitate is formed. Filter this precipitate, wash with water, and dry at 105°C for 1 hour: the residue melts between 172°C and 176°C.

- (2) Determine the absorption spectrum of a solution of Disopyramide in 0.05 mol/L sulfuric acid-methanol TS (1 in 25,000) as directed under the Ultraviolet-visible Spectrophotometry, and compare the spectrum with the Reference Spectrum: both spectra exhibit similar intensities of absorption at the same wavelengths.
- (3) Determine the infrared absorption spectrum of Disopyramide, previously dried, as directed in the potassium bromide disk method under the Infrared Spectrophotometry, and compare the spectrum with the Reference Spectrum: both spectra exhibit similar intensities of absorption at the same wave numbers.

Absorbance $E_{1\text{cm}}^{1\%}$ (269 nm): 194 – 205 (0.01 g, 0.05 mol/L sulfuric acid-methanol TS, 500 mL).

Purity (1) Heavy metals—Dissolve 1.0 g of Disopyramide in 10 mL of ethanol (95), and add 2 mL of dilute acetic acid (31) and water to make 50 mL. Perform the test using this solution as the test solution. Prepare the control solution as follows: to 2.0 mL of Standard Lead Solution

add 10 mL of ethanol (95), 2 mL of dilute acetic acid and water to make 50 mL (not more than 20 ppm).

- (2) Arsenic—Prepare the test solution with 1.0 g of Disopyramide according to Method 3, and perform the test using Apparatus B (not more than 2 ppm).
- (3) Related substances—Dissolve 0.40 g of Disopyramide in 10 mL of methanol, and use this solution as the sample solution. Pipet 1 mL of the sample solution, add methanol to make exactly 400 mL, and use this solution as the standard solution. Perform the test with these solutions as directed under the Thin-layer Chromatography. Spot 10 μ L each of the sample solution and the standard solution on a plate of silica gel with fluorescent indicator for thin-layer chromatography. Develop the plate with a mixture of 1-butanol, water and ammonia solution (28) (45:4:1) to a distance of about 10 cm, and air-dry the plate. Examine under ultraviolet light (main wavelength: 254 nm): the spots other than the principal spot from the sample solution are not more intense than the spot from the standard solution.

Loss on drying Not more than 0.5% (0.5 g, in vacuum, 80°C, 2 hours).

Residue on ignition Not more than 0.20% (1 g).

Assay Weigh accurately about 0.25 g of Disopyramide, dissolve in 30 mL of acetic acid (100), and titrate with 0.1 mol/L perchloric acid VS (potentiometric titration). Perform a blank determination, and make any necessary correction.

Each mL of 0.1 mol/L perchloric acid VS = 16.974 mg of $C_{21}H_{29}N_3O$

Containers and storage Containers—Tight containers.

Distigmine Bromide

臭化ジスチグミン

C₂₂H₃₂Br₂N₄O₄: 576.32

3,3'-[Hexamethylenebis(methyliminocarbonyloxy)]bis(1-methylpyridinium) dibromide [15876-67-2]

Distigmine Bromide contains not less than 98.5% of $C_{22}H_{32}Br_2N_4O_4$, calculated on the anhydrous basis.

Description Distigmine Bromide occurs as a white, crystalline powder.

It is very soluble in water, freely soluble in methanol, in ethanol (95) and in acetic acid (100), and slightly soluble in acetic anhydride.

The pH of a solution of Distigmine Bromide (1 in 100) is between 5.0 and 5.5.

It is slightly hygroscopic.

It is gradually colored by light.

Melting point: about 150°C (with decomposition).