Each mL of 0.1 mol/L perchloric acid VS = 40.64 mg of  $C_{20}H_{17}F_3N_2O_4$ 

Containers and storage Containers—Tight containers.

## Flomoxef Sodium

フロモキセフナトリウム

C<sub>15</sub>H<sub>17</sub>F<sub>2</sub>N<sub>6</sub>NaO<sub>7</sub>S<sub>2</sub>: 518.45 Monosodium (6*R*,7*R*)-7-(2-

difluoromethylsulfanylacetylamino)-3-[1-(2-hydroxyethyl)-1*H*-tetrazol-5-ylsulfanylmethyl]-7-methoxy-8-oxo-5-oxa-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate [*92823-03-5*]

Flomoxef Sodium conforms to the requirements of Flomoxef Sodium in the Requirements for Antibiotic Products of Japan.

**Description** Flomoxef Sodium occurs as a white to light yellowish white powder or mass.

It is very soluble in water and in methanol, sparingly soluble in ethanol (99.5), and practically insoluble in diethyl ether.

## Flopropione

フロプロピオン

C<sub>9</sub>H<sub>10</sub>O<sub>4</sub>: 182.17

1-(2,4,6-Trihydroxyphenyl)propan-1-one [2295-58-1]

Flopropione contains not less than 98.0% of  $C_9H_{10}O_4$ , calculated on the anhydrous basis.

**Description** Flopropione occurs as a white to pale yellow-brown, crystalline powder. It is odorless, and has a bitter taste.

It is very soluble in *N*,*N*-dimethylformamide, freely soluble in methanol, in ethanol (99.5) and in diethyl ether, and practically insoluble in water.

**Identification** (1) To 1 mL of a solution of Flopropione in ethanol (99.5) (1 in 200) add 4 mL of water and 1 mL of iron (III) nitrate TS: a red-purple color develops.

(2) Determine the absorption spectrum of a solution of Flopropione in ethanol (99.5) (1 in 200,000) as directed un-

der the Ultraviolet-visible Spectrophotometry, and compare the spectrum with the Reference Spectrum: both spectra exhibit similar intensities of absorption at the same wavelengths.

Melting point 177 - 181°C

**Purity** (1) Clarity and color of solution—Dissolve 1.0 g of Flopropione in 10 mL of ethanol (99.5): the solution is clear, and has no more color than Matching Fluid H.

- (2) Heavy metals—Proceed with 1.0 g of Flopropione 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).
- (3) Arsenic—Prepare the test solution with 1.0 g of Flopropione according to Method 3, and perform the test using Apparatus B (not more than 2 ppm).
- (4) Related substances—Dissolve 0.10 g of Flopropione in 10 mL of ethanol (99.5), and use this solution as the sample solution. Pipet 1 mL of the sample solution, add ethanol (99.5) to make exactly 200 mL, and use this solution as the standard solution. Perform the test with these solutions as directed under the Thin-layer Chromatography. Spot  $10 \,\mu\text{L}$  each of the sample solution and the standard solution on a plate of silica gel for thin-layer chromatography. Develop the plate with a mixture of hexane, ethanol (99.5) and acetic acid (100) (40:20:1) to a distance of about 10 cm, and air-dry the plate. Spray evenly *p*-nitrobenzenediazonium TS for spraying on the plate, and dry in cold wind for about 5 minutes: the spots other than the principal spot from the sample solution are not more intense than the spot from the standard solution.

Water Not more than 4.0% (0.5 g, direct titration).

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

Assay Weigh accurately about 0.3 g of Flopropione, dissolve in 30 mL of N,N-dimethylformamide, and titrate with 0.1 mol/L tetramethylammonium hydroxide VS (potentiometric titration). Perform a blank determination, and make any necessary correction.

Each mL of 0.1 mol/L tetramethylammonium hydroxide VS = 18.218 mg of  $C_9H_{10}O_4$ 

**Containers and storage** Containers—Tight containers. Storage—Light-resistant.

## **Flucytosine**

フルシトシン

C<sub>4</sub>H<sub>4</sub>FN<sub>3</sub>O: 129.09

4-Amino-5-fluoropyrimidin-2(1*H*)-one [2022-85-7]

Flucytosine, when dried, contains not less than 98.5% of  $C_4H_4FN_3O$ , and not less than 14.0% and not more than 15.5% of fluorine (F: 19.00).