ing nitric acid, and evaporate on a water bath to dryness. Then add 2 mL of diluted hydrochloric acid (1 in 2) and 0.2 g of zinc powder, heat for 10 minutes on a water bath, cool, and filter. Add 20 mL of water to the filtrate. The solution responds to the Qualitative Tests for primary aromatic amines.

(3) To 5 mL of a solution of Clemastine Fumarate (1 in 50,000), add 5 mL of 4-dimethylaminobenzaldehyde TS, and warm for 10 minutes: a red-purple color develops.

(4) Perform the test with Clemastine Fumarate as directed under the Flame Coloration Test (2): a green color appears.

(5) Dissolve 0.04 g of Clemastine Fumarate and 0.01 g of fumaric acid for thin-layer chromatography in 2 mL each of a mixture of ethanol (95) and water (4:1) by gentle warming, and use these solutions as the sample solution and the standard solution, respectively. Perform the test with these solutions as directed under the Thin-layer Chromatography. Spot 5 \( \mu L \) 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 isopropyl ether, formic acid and water (90:7:3) to a distance of about 10 cm, and air-dry the plate. Examine the plate under ultraviolet light (main wavelength: 254 nm): the spot with larger \( R_f \) value from the sample solution has the same \( R_f \) value as the spot from the standard solution.

**Optical rotation** \( \left[ \alpha \right]_D^{20} = +16 \pm +18^\circ \) (after drying, 0.1 g, methanol, 10 mL, 100 mm).

**Melting point** 176 – 180°C (with decomposition).

**Purity** (1) Clarity and color of solution—Dissolve 0.5 g of Clemastine Fumarate in 10 mL of methanol by warming: the solution is clear and colorless.

(2) Heavy metals—Perform the test with 1.0 g of Clemastine Fumarate according to Method 2. Prepare the control solution with 2.0 mL of Standard Lead Solution (not more than 20 ppm).

(3) Arsenic—Take 1.0 g of Clemastine Fumarate, prepare the test solution according to Method 3, and perform the test using Apparatus B (not more than 2 ppm).

(4) Related Substances—Dissolve 0.10 g of Clemastine Fumarate in 5 mL of methanol, and use this solution as the sample solution. Pipet 1 mL of the sample solution, add methanol to make exactly 250 mL, and use this solution as the standard solution (1). Pipet 5 mL of this solution, add methanol to make exactly 10 mL, and use this solution as the standard solution (2). Perform the test with these solutions as directed under the Thin-layer Chromatography. Spot 5 \( \mu L \) each of the sample solution, the standard solution (1) and (2) on a plate of silica gel for thin-layer chromatography. Develop the plate with a mixture of chloroform, methanol and ammonia solution (28) (90:10:1) to a distance of about 10 cm, and air-dry the plate. After spraying evenly Dragendorff’s TS on the plate, immediately spray evenly hydrogen peroxide TS: the spots other than the principal spot from the sample solution are not more intense than the spot from the standard solution (1), and not more than 2 spots from the sample solution are more intense than the spot from the standard solution (2).

**Loss on drying** Not more than 0.5% (1 g, 105°C, 4 hours).

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

**Assay** Weigh accurately about 0.4 g of Clemastine Fumarate, previously dried, dissolved in 50 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 = 46.00 mg of C_{21}H_{26}ClNO.C_{16}H_{2}O_{4}

**Containers and storage** Containers—Tight containers.

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### Clindamycin Phosphate

#### リン酸クリンダマイシン

C_{18}H_{26}ClN_{4}O_{5}PS: 504.96

Methyl 7-chloro-6,7,8-trideoxy-6-[(2S,4R)-1-methyl-4-propylpyrrolidine-2-carboxamido]-1-thio-D-threo-o-D-galacto-octopyranoside 2-dihydrogenophosphate [24729-96-2]

Clindamycin Phosphate conforms to the requirements of Clindamycin Phosphate in the Requirements for Antibiotic Products of Japan.

**Description** Clindamycin Phosphate occurs as a white to pale yellowish white, crystalline powder.

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

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### Clinofibrate

#### クリノフィブラート

C_{28}H_{36}O_{5}: 468.58

2,2’-(4,4’-Cyclohexyldenediphenoxy)-2,2’-dimethyl dibutanoic acid [30299-08-2]

Clinofibrate, when dried, contains not less than 98.5% of C_{28}H_{36}O_{5}.

**Description** Clinofibrate occurs as a white to yellowish white powder.

It is odorless and has no taste.

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