ammonium iron (III) sulfate TS). Perform a blank determination and make any necessary correction.

Each mL of 0.1 mol/L silver nitrate VS = 7.990 mg of Br

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

**Mercurochrome Solution**

**Mercobromin Solution**

マーキュクローム液

Mercurochrome Solution contains not less than 0.42 w/v% and not more than 0.56 w/v% of mercury (Hg: 200.59).

**Method of preparation**

<table>
<thead>
<tr>
<th>Mercurochrome</th>
<th>20 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purified Water</td>
<td>a sufficient quantity</td>
</tr>
<tr>
<td></td>
<td>To make 1000 mL</td>
</tr>
</tbody>
</table>

Prepare by mixing the above ingredients.

**Description** Mercurochrome Solution is a dark red liquid.

**Identification (1)** To 1 mL of Mercurochrome Solution add 40 mL of water: the resulting solution shows a red color and a yellow-green fluorescence.

(2) Dilute 1 mL of Mercurochrome Solution with 4 mL of water, and add 3 drops of dilute sulfuric acid: a red-orange precipitate is produced.

(3) Evaporate 5 mL of Mercurochrome Solution to dryness, and proceed with the residue as directed in the Identification (2) under Mercurochrome.

(4) To 5 mL of Mercurochrome Solution add 1 mL of a solution of sodium hydroxide (1 in 6), and proceed as directed in the Identification (4) under Mercurochrome.

**Purity** Dyestuff—To 20 mL of Mercurochrome Solution add 3 mL of dilute sulfuric acid, and filter: the filtrate has no more color than Matching Fluid C.

**Assay** Transfer exactly measured 30 mL of Mercurochrome Solution to an iodine flask, dilute with 20 mL of water, add 8 mL of acetic acid (31) and 20 mL of chloroform, and proceed as directed in the Assay (1) under Mercurochrome.

Each mL of 0.05 mol/L iodine VS = 10.030 mg of Hg

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

**Meropenem Trihydrate**

メロペンネム 三水和物

C₁₇H₂₅N₂O₅S·3H₂O: 437.51
(4R,5S,6S)-3-[(3S,5S)-5-(Dimethylcarbamoyl)pyrrolidin-3-ylsulfanyl]-6-[(1R)-1-hydroxyethyl]-4-methyl-7-oxo-1-azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid trihydrate [I19478-56-7]

Meropenem Trihydrate contains not less than 900 μg (potency) per mg, calculated on the anhydrous basis. The potency of Meropenem Trihydrate is expressed as mass (potency) of meropenem (C₁₇H₂₅N₂O₅S: 383.46).

**Description** Meropenem Trihydrate occurs as a white to light yellow crystalline powder.

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

**Identification (1)** Dissolve 0.01 g of Meropenem Trihydrate in 2 mL of water, add 3 mL of hydroxylammonium chloride-ethanol TS, allow to stand for 5 minutes, add 1 mL of acidic ammonium iron (III) sulfate TS, and shake: a red-brown color develops.

(2) Determine the absorption spectra of solutions of Meropenem Trihydrate and Meropenem Trihydrate Reference Standard (3 in 100,000) as directed under the Ultraviolet-visible Spectrophotometry, and compare the spectra: both spectra exhibit similar intensities of absorption at the same wavelengths.

(3) Determine the infrared absorption spectra of Meropenem Trihydrate and Meropenem Trihydrate Reference Standard as directed in the potassium bromide disk method under the Infrared Spectrophotometry, and compare the spectra: both spectra exhibit similar intensities of absorption at the same wave numbers.

**Optical rotation [α]D₉₀ = −17° to −21° (0.22 g calculated as the anhydrous basis, water, 50 mL, 100 mm).

**pH** Dissolve 0.2 g of Meropenem Trihydrate in 20 mL of water: the pH of the solution is between 4.0 and 6.0.

**Purity (1)** Clarity and color of solution—Being specified separately.

(2) Heavy metals—Proceed with 2.0 g of Meropenem Trihydrate according to Method 2, and perform the test. Prepare the control solution with 2.0 mL of Standard Lead Solution (not more than 10 ppm).

(3) Related substances—Being specified separately.

**Water** Not less than 11.4% and not more than 13.4% (0.15 g, coulometric titration. Use a titration apparatus equipped with a water evaporation device, and measure at 140°C of the evaporating temperature).