Containers and storage Containers—Tight containers. Storage—Light-resistant, and in a cold place.

## **Ampicillin**

### Aminobenzylpenicillin

アンピシリン

 $C_{16}H_{19}N_3O_4S.3H_2O: 403.45$  (2S,5R,6R)-6-[(2R)-2-Amino-2-phenylacetylamino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid trihydrate [7177-48-2]

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

**Description** Ampicillin occurs as white to light yellowish white crystals or crystalline powder.

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

# **Anhydrous Ampicillin**

#### Anhydrous Aminobenzylpenicillin

無水アンピシリン

 $C_{16}H_{19}N_3O_4S$ : 349.40 (2S,5R,6R)-6-[(2R)-2-Amino-2-phenylacetylamino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid [69-53-4]

Anhydrous Ampicillin conforms to the requirements of Anhydrous Ampicillin in the Requirements for Antibiotic Products of Japan.

**Description** Anhydrous Ampicillin occurs as a white to light yellowish white powder.

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

# **Ampicillin Sodium**

### Aminobenzylpenicillin Sodium

アンピシリンナトリウム

C<sub>16</sub>H<sub>18</sub>N<sub>3</sub>NaO<sub>4</sub>S: 371.39

Monosodium (2S,5R,6R)-6-[(2R)-2-amino-2-phenylacetylamino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylate [69-52-3]

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

**Description** Ampicillin Sodium occurs as white to light yellowish white crystals or crystalline powder.

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

### **Amyl Nitrite**

亜硝酸アミル

C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub>: 117.15

Amyl Nitrite is the nitrous acid ester of 3-methylbutanol-1 and contains a small quantity of 2-methylbutanol-1 and the nitrous acid esters of other homologues.

Amyl Nitrite contains not less than 90.0% of  $C_5H_{11}NO_2$ .

**Description** Amyl Nitrite is a clear, light yellowish liquid, and has a characteristic, fruity odor.

It is miscible with ethanol (95), and with diethyl ether.

It is practically insoluble in water.

It is affected by light and by heat.

It is volatile at ordinary temperature and flammable even at a low temperature.

Boiling point: about 97°C

**Identification** Determine the infrared spectrum of Amyl Nitrite as directed in the liquid film 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.

**Specific gravity**  $d_{20}^{20}$ : 0.871 – 0.880

**Purity** (1) Acid—To 5 mL of Amyl Nitrite add a mixture of 1.0 mL of 1 mol/L sodium hydroxide VS, 10 mL of water and 1 drop of phenolphthalein TS, shake, and allow to stand for 1 minute: the light red color of the water layer does not disappear.

(2) Water—Allow 2.0 mL of Amyl Nitrite to stand in ice water: no turbidity is produced.