

Method of preparation

Silver Protein	30 g
Glycerin	100 mL
Mentha Water	a sufficient quantity
To make 1000 mL	

Dissolve and mix the above ingredients.

Description Silver Protein Solution is a clear, brown liquid, having the odor of mentha oil.

Identification (1) To 1 mL of Silver Protein Solution add 10 mL of ethanol (95), mix, and add 2 mL of sodium hydroxide TS. Add immediately 1 mL of a solution of copper (II) chloride dihydrate in ethanol (95) (1 in 10), shake, and filter: the filtrate is blue in color (glycerin).

(2) To 3 mL of Silver Protein Solution add water to make 10 mL, add 2 mL of dilute hydrochloric acid, shake frequently for 5 minutes, and filter. Add 5 mL of a solution of sodium hydroxide (1 in 10) to the filtrate, and add 2 mL of diluted copper (II) sulfate TS (2 in 25): a purple color develops (silver protein).

(3) To 5 mL of the sample solution obtained in (2) add iron (III) chloride TS dropwise: a brown precipitate is formed (silver protein).

(4) Place 3 mL of Silver Protein Solution in a crucible, heat cautiously, and evaporate almost to dryness. Then incinerate gradually by strong heating, dissolve the residue in 1 mL of nitric acid by warming, and add 10 mL of water: the solution responds to the Qualitative Tests (1) for silver salt.

Assay Pipet 25 mL of Silver Protein Solution into a 250-mL Kjeldahl flask, and heat cautiously until a white gas of glycerin is evolved. After cooling, add 25 mL of sulfuric acid, cover the flask with a funnel, and heat gently for 5 minutes. After cooling, drop gradually 5 mL of nitric acid, heat with occasional shaking in a water bath for 45 minutes, and cool. Add 2 mL of nitric acid, boil gently, and repeat this operation until the solution becomes colorless upon cooling. Transfer cautiously the cooled content in the flask into a 500-mL conical flask with 250 mL of water. Boil gently for 5 minutes, cool, and titrate with 0.1 mol/L ammonium thiocyanate VS (indicator: 3 mL of ammonium iron (III) sulfate TS).

Each mL of 0.1 mol/L ammonium thiocyanate VS
= 10.787 mg of Ag

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

Simple Ointment

単軟膏

Method of preparation

Yellow Beeswax	330 g
Fixed oil	a sufficient quantity
To make 1000 g	

Prepare as directed under Ointments, with the above ingredients.

Description Simple Ointment is yellow in color. It has a slight, characteristic odor.

Containers and storage Containers—Tight containers.

Simple Syrup

単シロップ

Simple Syrup is an aqueous solution of Sucrose.

Method of preparation

Sucrose	850 g
Purified Water	a sufficient quantity
To make 1000 mL	

Prepare as directed under Syrups, with the above materials.

Description Simple Syrup is a clear, colorless to pale yellow, viscous liquid.

It is odorless and has a sweet taste.

Identification (1) Evaporate Simple Syrup on a water bath to dryness. 1 g of the residue so obtained, when ignited, melts to swell, and decomposes, emitting an odor of caramel, to bulky charcoal.

(2) To 0.1 g of the residue obtained in (1) add 2 mL of dilute sulfuric acid, boil, add 4 mL of sodium hydroxide TS and 3 mL of Fehling's TS, and heat to boiling: a red to dark red precipitate is produced.

Specific gravity d_{20}^{20} : 1.310 – 1.325

Purity (1) Artificial sweetening agents—To 100 mL of Simple Syrup add 100 mL of water, shake, acidify a 50-mL portion of the solution with dilute sulfuric acid, and make another 50-mL portion alkaline with sodium hydroxide TS. To each portion add 100 mL of diethyl ether, shake, separate the diethyl ether layer, and evaporate the combined diethyl ether extract on a water bath to dryness: the residue has no sweet taste.

(2) Salicylic acid—To the residue obtained in (1) add 2 to 3 drops of dilute iron (III) chloride TS: no purple color develops.

Containers and storage Containers—Tight containers.

Sinomenium Stem

Sinomeni Caulis et Rhizoma

ボウイ

Sinomenium Stem is the climbing stem and rhizome of *Sinomenium acutum* Rehder et Wilson (*Menispermaceae*).

Description Round or elliptic sections, 0.2 – 0.4 cm in thickness, 1 – 4.5 cm in diameter; cortex on both fractured surfaces, light brown to dark brown; in xylem, grayish brown vessel portions and dark brown medullary rays lined alternately and radially; flank, dark gray, with longitudinal wrin-

kles and warty protrusions. Almost odorless; taste, bitter.

Under a microscope, a transverse section reveals extremely thick-walled stone cells in primary cortex and pericycle; irregular-sized vessels lined nearly stepwise in the vessel portion; cells of medullary ray mostly not lignified, and extremely thick-walled and large stone cells scattered here and there; primary cortex containing needle crystals of calcium oxalate; medullary rays containing starch grains, simple grain, 3–10 μm in diameter, and small needle crystals of calcium oxalate.

Identification To 0.5 g of pulverized *Sinomenium* Stem add 10 mL of dilute acetic acid, heat for 2 minutes on a water bath with frequent shaking, cool, and filter. To 5 mL of the filtrate add 2 drops of Dragendorff's TS: immediately, an orange-yellow precipitate is produced.

Total ash Not more than 6.0%.

Acid-insoluble ash Not more than 0.5%.

Freeze-dried Smallpox Vaccine

乾燥痘そうワクチン

Freeze-dried Smallpox Vaccine is a preparation for injection which is dissolved before use. It contains live vaccinia virus.

It conforms to the requirements of Freeze-dried Smallpox Vaccine in the Minimum Requirements for Biological Products.

Description Freeze-dried Smallpox Vaccine becomes a white to gray, turbid liquid on addition of solvent.

Freeze-dried Smallpox Vaccine Prepared in Cell Culture

乾燥細胞培養痘そうワクチン

Freeze-dried Smallpox Vaccine Prepared in Cell Culture is a preparation for injection which is dissolved before use. It contains live vaccinia virus.

It conforms to the requirements of Freeze-dried Smallpox Vaccine Prepared in Cell Culture in the Minimum Requirements for Biological Products.

Description Freeze-dried Smallpox Vaccine Prepared in Cell Culture becomes a reddish clear liquid on addition of solvent.

Smilax Rhizome

Smilaxis Rhizoma

サンキライ

Smilax Rhizome is the tuber of *Smilax glabra* Roxburgh (*Liliaceae*).

Description Flattened and irregular cylindrical tuber, often with node-like branches; usually 5–15 cm in length, 2–5 cm in diameter; the outer surface grayish yellow-brown to yellow-brown, and the upper surface scattered with knotty remains of stem; cross section irregular elliptical to obtuse triangular, consisting of extremely thin cortical layer and mostly of stele. Odor, slight; almost tasteless.

Under a microscope, a transverse section reveals a 2- to 3-cell-wide cork layer, with extremely narrow cortical layer, usually consisting of a 2- to 4-cell-wide, thick-walled parenchyma cells, showing large mucilage cells here and there; mucilage cell containing raphides of calcium oxalate; stele consisting chiefly of parenchyma cells, and scattered with vascular bundles; parenchyma cells containing starch grains composed mostly of simple grains, 12–36 μm in diameter, and sometimes mixed with 2- to 4-compound grains.

Total ash Not more than 5.0%.

Powdered Smilax Rhizome

Smilaxis Rhizoma Pulveratum

サンキライ末

Powdered Smilax Rhizome is the powder of Smilax Rhizome.

Description Powdered Smilax Rhizome occurs as a light yellow-brown powder, and has a slight odor, and is practically tasteless.

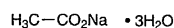
Under a microscope, Powdered Smilax Rhizome reveals starch grains and fragments of parenchyma cells containing them; fragments of raphides of calcium oxalate contained in mucilage masses; fragments of lignified parenchyma cells of cortical layer; fragments of cork cells and scalariform vessels; starch grains composed mostly of simple grains, and mixed with a few 2- to 4-compound grains 12–36 μm in diameter.

Purity Foreign matter—Under a microscope, Powdered Smilax Rhizome does not show a large quantity of stone cells or thick-walled fibers.

Total ash Not more than 5.0%.

Sodium Acetate

酢酸ナトリウム



$\text{C}_2\text{H}_3\text{NaO}_2 \cdot 3\text{H}_2\text{O}$: 136.08
Monosodium acetate trihydrate [6131-90-4]

Sodium Acetate, when dried, contains not less than 99.5% of $\text{C}_2\text{H}_3\text{NaO}_2$: 82.03.

Description Sodium Acetate occurs as colorless crystals or a white, crystalline powder. It is odorless or has a slight, acetous odor. It has a cool, saline and slightly bitter taste.

It is very soluble in water, freely soluble in acetic acid (100), soluble in ethanol (95), and practically insoluble in diethyl ether.