Dried Aluminum Potassium Sulfate

Burnt Alum

乾燥硫酸アルミニウムカリウム

$AlK(SO_4)_2$: 258.21

Dried Aluminum Potassium Sulfate, when dried, contains not less than 98.0% of $AlK(SO_4)_2$.

Description Dried Aluminum Potassium Sulfate occurs as white masses or white powder. It is odorless. It has a slightly sweet, astringent taste.

It is freely soluble in hot water and practically insoluble in ethanol (95).

It dissolves slowly in water.

Identification A solution of Dried Aluminum Potassium Sulfate (1 in 20) responds to the Qualitative Tests for aluminum salt, to the Qualitative Tests (1), (3) and (4) for potassium salt, and to the Qualitative Tests (1) and (3) for sulfate.

Purity (1) Water-insoluble substances—To 2.0 g of Dried Aluminum Potassium Sulfate add 40 mL of water, shake frequently, and allow to stand for 48 hours. Collect the insoluble residue on a glass filter (G4), wash with 50 mL of water, and dry at 105°C for 2 hours: the mass of the residue is not more than 50 mg.

(2) Heavy metals—Dissolve 0.5 g of Dried Aluminum Potassium Sulfate in 45 mL of water, and filter, if necessary. Add 2 mL of dilute acetic acid and water to make 50 mL, and perform the test using this solution as the test solution. Prepare the control solution with 2.0 mL of Standard Lead Solution, 2 mL of dilute acetic acid and water to make 50 mL (not more than 40 ppm).

(3) Iron—Prepare the test solution with 0.54 g of Dried Aluminum Potassium Sulfate according to Method 1, and perform the test according to Method A. Prepare the control solution with 2.0 mL of Standard Iron Solution (not more than 37 ppm).

(4) Arsenic—Prepare the test solution with 0.40 g of Dried Aluminum Potassium Sulfate, according to Method 1, and perform the test using Apparatus B (not more than 5 ppm).

Loss on drying Not more than 15.0% (2 g, 200°C, 4 hours).

Assay Weigh accurately about 1.2 g of Dried Aluminum Potassium Sulfate, previously dried, add 80 mL of water, and heat on a water bath with occasional shaking for 20 minutes. Cool, add water to make exactly 100 mL, and filter, if necessary. Discard the first 30 mL of the filtrate, take exactly the subsequent 20 mL of the filtrate, and add exactly 30 mL of 0.05 mol/L disodium dihydrogen ethylenediamine tetraacetate VS and 20 mL of acetic acid-ammonium acetate buffer solution, pH 4.8, boil for 5 minutes, and cool. Add 55 mL of ethanol (95), and titrate with 0.05 mol/L zinc acetate VS (indicator: 2 mL of dithizone TS), until the color of the solution changes from light dark green to light red. Perform a blank determination.

Each mL of 0.05 mol/L disodium dihydrogen ethylenediamine tetraacetate VS
= 12.910 mg of $AlK(SO_4)_2$

Containers and storage Containers—Tight containers.

Amomum Seed

Amomi Semen

シュクシャ

Amomum Seed is the seed mass of *Amomum xanthioides* Wallich (*Zingiberaceae*).

Description Approximately spherical or ellipsoidal mass, 1 – 1.5 cm in length, 0.8 – 1 cm in diameter; externally grayish brown to dark brown, and with white powder in those dried by spreading lime over the seeds; the seed mass is divided into three loculi by thin membranes, and each loculus contains 10 to 20 seeds joining by aril; each seed is polygonal and spherical, 0.3 – 0.5 cm in length, about 0.3 cm in diameter, externally dark brown, with numerous, fine protrusions; hard tissue; under a magnifying glass, a longitudinal section along the raphe reveals oblong section, with deeply indented hilum and with slightly indented chalaza; white perisperm covering light yellow endosperm and long embryo. Characteristic aroma when cracked, and taste acrid.

Total ash Not more than 9.0%.

Acid-insoluble ash Not more than 3.0%.

Essential oil content Perform the test with 30.0 g of pulverized Amomum Seed as directed in the Essential oil content under Crude Drugs: the volume of essential oil is not less than 0.6 mL.

Powdered Amomum Seed

Amomi Semen Pulveratum

シュクシャ末

Powdered Amomum Seed is the powder of Amomum Seed.

Description Powdered Amomum seed occurs as a grayish brown powder, and has a characteristic aroma and an acrid taste.

Under a microscope, Powdered Amomum Seed reveals fragments of wavy perisperm cells filled with starch grains and containing in each cell a calcium oxalate crystal; yellow and long epidermal cells of seed coat and fragments of thin-walled tissue perpendicular to them; fragments of groups of brown, thick-walled polygonal stone cells.

Total ash Not more than 9.0%.

Acid-insoluble ash Not more than 3.0%.

Essential oil content Perform the test with 30.0 g of Powdered Amomum Seed as directed in the Essential oil content

under Crude Drugs: the volume of essential oil is not less than 0.4 mL.

Containers and storage Containers—Tight containers.

Anemarrhena Rhizome

Anemarrhenae Rhizoma

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Anemarrhena Rhizome is the rhizome of *Anemarrhena asphodeloides* Bunge (*Liliaceae*).

Description Rather flat and cord-like rhizome, 3 - 15 cm in length, 0.5 - 1.5 cm in diameter, slightly bent and branched; externally yellow-brown to brown; on the upper surface, a longitudinal furrow and hair-like remains or scars of leaf sheath forming fine ring-nodes; on the lower surface, scars of root appearing as numerous round spot-like hollows; light and easily broken. Under a magnifying glass, a light yellow-brown transverse section reveals an extremely narrow cortex; stele porous, with many irregularly scattered vascular bundles. Odor, slight; taste, slightly sweet and mucous, followed by bitterness.

Identification (1) Shake vigorously 0.5 g of pulverized Anemarrhena Rhizome with 10 mL of water in a test tube: a lasting fine foam is produced. Filter the mixture, and to 2 mL of the filtrate add 1 drop of iron (III) chloride TS: a dark green precipitate is produced.

(2) Warm 0.5 g of pulverized Anemarrhena Rhizome with 2 mL of acetic anhydride on a water bath for 2 minutes while shaking, then filter, and to the filtrate add carefully 1 mL of sulfuric acid to make two layers: a red-brown color develops at the zone of contact.

Purity Foreign matter—The amount of fiber, originating from the dead leaves, and other foreign matter contained in Anemarrhena Rhizome does not exceed 3.0%.

Total ash Not more than 7.0%.

Acid-insoluble ash Not more than 2.5%.

Angelica Dahurica Root

ビャクシ

Angelica Dahurica Root is the root of *Angelica dahurica* Bentham et Hooker (*Umbelliferae*).

Description Main root from which many long roots are branched out and nearly fusiform and conical in whole shape, 10 - 25 cm in length; externally grayish brown to dark brown, with longitudinal wrinkles, and with numerous scars of rootlets laterally elongated and protruded. A few remains of leaf sheath at the crown and ring-nodes closely protruded near the crown. In a transverse section, the outer region is grayish white in color, and the central region is sometimes dark brown in color. Odor, characteristic; taste, slightly bitter.

Identification To 0.2 g of pulverized Angelica Dahurica Root add 5 mL of ethanol (95), allow to stand for 5 minutes with shaking, and filter. Examine the filtrate under ultraviolet light (main wavelength: 365 nm): a blue to blue-purple fluorescence develops.

Purity (1) Leaf sheath—The amount of leaf sheath contained in Angelica Dahurica Root does not exceed 3.0%.

(2) Foreign matter—The amount of foreign matter other than leaf sheath contained in Angelica Dahurica Root does not exceed 1.0%.

Total ash Not more than 7.0%.

Acid-insoluble ash Not more than 2.0%.

Extract content Dilute ethanol-soluble extract: not less than 25.0%.

Dental Antiformin

Dental Sodium Hypochlorite Solution

歯科用アンチホルミン

Dental Antiformin contains not less than 3.0 w/v% and not more than 6.0 w/v% of sodium hypochlorite (NaClO: 74.44).

Description Dental Antiformin is a slightly light yellow-green, clear liquid. It has a slight odor of chlorine.

It gradually changes by light.

Identification (1) Dental Antiformin changes red litmus paper to blue, and then decolorizes it.

(2) To Dental Antiformin add dilute hydrochloric acid: it evolves the odor of chlorine, and the gas changes potassium iodide starch paper moistened with water to blue.

(3) Dental Antiformin responds to the Qualitative Tests (1) for sodium salt.

Assay Measure exactly 3 mL of Dental Antiformin in a glass-stoppered flask, add 50 mL of water, 2 g of potassium iodide and 10 mL of acetic acid (31), and titrate the liberated iodine with 0.1 mol/L sodium thiosulfate VS (indicator: 3 mL of starch TS).

Each mL of 0.1 mol/L sodium thiosulfate VS
= 3.7221 mg of NaClO

Containers and storage Containers—Tight containers.
Storage—Light-resistant, and not exceeding 10°C.

Apricot Kernel

Armeniacae Semen

キョウニン

Apricot Kernel is the seed of *Prunus armeniaca*