

Each mL of 1 mol/L sodium hydroxide VS
= 60.05 mg of C₂H₄O₂

Containers and storage Containers—Tight containers.

Achyranthes Root

Achyranthis Radix

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Achyranthes Root is the root of *Achyranthes fauriei* Leveillé et Vaniot or *Achyranthes bidentata* Blume (*Amaranthaceae*).

Description Main root or main root with some lateral roots, with or without short remains of rhizome at the crown; main root, long cylindrical and sometimes somewhat tortuous, 15–90 cm in length, 0.3–0.7 cm in diameter; externally grayish yellow to yellow-brown, with numerous longitudinal wrinkles, and with scattering scars of lateral roots. Fractured surface is flat; grayish white to light brown on the circumference, and with yellowish white xylem in the center. Hard and brittle, or flexible. Odor, slight; taste, slightly sweet, and mucilaginous.

Under a microscope, a transverse section reveals a rather distinct cambium separating the cortex from the xylem; small protoxylem located at the center of the xylem, and surrounded by numerous vascular bundles arranged on several concentric circles; parenchyma cells containing sand crystals of calcium oxalate; starch grains absent.

Identification Shake vigorously 0.5 g of pulverized Achyranthes Root with 10 mL of water: a lasting fine foam is produced.

Purity (1) Stem—The amount of stems contained in Achyranthes Root does not exceed 5.0%.

(2) Foreign matter—The amount of foreign matter other than stems contained in Achyranthes Root does not exceed 1.0%.

Loss on drying Not more than 17.0% (6 hours).

Total ash Not more than 10.0%.

Acid-insoluble ash Not more than 1.5%.

Acrinol and Zinc Oxide Oil

アクリノール・チンク油

Method of preparation

Acrinol, very finely powdered	10 g
Zinc Oxide Oil	990 g
To make 1000 g	

Prepare by mixing the above ingredients.

Description Acrinol and Zinc Oxide Oil is a yellowish white, slimy substance. Separation of a part of its ingredients occurs on prolonged standing.

Identification (1) Shake well 1 g of Acrinol and Zinc Oxide Oil with 10 mL of diethyl ether, 2 mL of acetic acid (100) and 10 mL of water, and separate the water layer. Shake the layer with 5 mL of hydrochloric acid and 2 to 3 drops of sodium nitrite TS, and allow to stand: a dark red color is produced (acrinol).

(2) Place 1 g of Acrinol and Zinc Oxide Oil in a crucible, melt by warming, heat, gradually raising the temperature until the mass is thoroughly charred, and then ignite strongly: a yellow color is produced, and disappears on cooling. To the residue add 10 mL of water and 5 mL of dilute hydrochloric acid, filter after thorough shaking, and to the filtrate add 2 to 3 drops of potassium hexacyanoferrate (II) TS: a white precipitate is formed (zinc oxide).

(3) Shake well 0.2 g of Acrinol and Zinc Oxide Oil with 20 mL of ethanol (95) and 1 mL of acetic acid (100), centrifuge, filter, and use the filtrate as the sample solution. Separately, dissolve 5 mg of acrinol in 50 mL of ethanol (95) and 2.5 mL of acetic acid (100), and use this solution as the standard solution. Perform the test with these solutions as directed under the Thin-layer Chromatography. Spot 5 μL each of the sample solution and the standard solution on a plate of silica gel for thin-layer chromatography. Develop the plate with a mixture of 2-propanol and acetic acid (100) (9:1) to a distance of about 10 cm, and air-dry the plate. Examine under ultraviolet light (main wavelength: 365 nm): the spots from the sample solution and the standard solution exhibit a blue fluorescence and show the same R_f value.

Containers and storage Containers—Tight containers.

Storage—Light-resistant.

Compound Acrinol and Zinc Oxide Oil

複方アクリノール・チンク油

Method of preparation

Acrinol, very finely powdered	10 g
Zinc Oxide Oil	650 g
Ethyl Aminobenzoate, finely powdered	50 g
White Beeswax	20 g
Hydrophilic Petrolatum	270 g

To make 1000 g

Prepare by mixing the above ingredients.

Description Compound Acrinol and Zinc Oxide Oil is light yellow to yellow in color.

Identification (1) Shake well 1 g of Compound Acrinol and Zinc Oxide Oil with 10 mL of diethyl ether, 2 mL of acetic acid (100) and 10 mL of water, and separate the water layer. Shake the layer with 5 mL of hydrochloric acid and 2 to 3 drops of sodium nitrite TS, and allow to stand: a dark red color is produced (acrinol).

(2) Place 1 g of Compound Acrinol and Zinc Oxide Oil in a crucible, melt by warming, heat, gradually raising the temperature until the mass is thoroughly charred, and then ignite strongly: a yellow color is produced, and disappears on cooling. To the residue add 10 mL of water and 5 mL of di-

lute hydrochloric acid, shake well, and filter. To the filtrate add 2 to 3 drops of potassium hexacyanoferrate (II) TS: a white precipitate is produced (zinc oxide).

(3) Shake well 0.2 g of Compound Acrinol and Zinc Oxide Oil with 20 mL of ethanol (95) and 1 mL of acetic acid (100), centrifuge, filter, and use the filtrate as the sample solution. Separately, dissolve 5 mg of acrinol and 0.025 g of ethyl aminobenzoate in 50 mL of ethanol (95) and in 2.5 mL of acetic acid (100), respectively, and use both solutions as standard solution (1) and standard solution (2). Perform the test with these solutions as directed under the Thin-layer Chromatography. Spot 5 μ L each of the sample solution and the standard solutions on a plate of silica gel with fluorescent indicator for thin-layer chromatography. Develop the plate with a mixture of 2-propanol and acetic acid (100) (9:1) to a distance of about 10 cm, and air-dry the plate. Examine under ultraviolet light (main wavelength: 365 nm): the spots from the sample solution and standard solution (1) exhibit a blue fluorescence, and show the same *R_f* value. Also examine under ultraviolet light (main wavelength: 254 nm): the spots from the sample solution and standard solution (2) exhibit a purple color, and show the same *R_f* value.

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

Acrinol and Zinc Oxide Ointment

アクリノール・亜鉛華軟膏

Method of preparation

Acrinol, very finely powdered	10 g
Zinc Oxide Ointment	990 g

To make 1000 g

Prepare as directed under Ointments, with the above ingredients.

Description Acrinol and Zinc oxide Ointment is yellow in color.

Identification (1) Shake 0.5 g of Acrinol and Zinc Oxide Ointment with 5 mL of diethyl ether, 5 mL of dilute hydrochloric acid and 2 to 3 drops of sodium nitrite TS, and allow to stand: a dark red color develops in the water layer (acrinol).

(2) Ignite 0.5 g of Acrinol and Zinc Oxide Ointment to char, and dissolve the residue in 5 mL of dilute hydrochloric acid: the solution responds to the Qualitative Tests for zinc salt.

(3) Shake 0.5 g of Acrinol and Zinc Oxide Ointment with 5 mL of diethyl ether, 1 mL of acetic acid (100) and 5 mL of water, separate the water layer, and use the water layer as the sample solution. Dissolve 5 mg of acrinol in 1 mL of acetic acid (100) and 5 mL of water, and use this solution as the standard solution. Perform the test with these solutions as directed under the Thin-layer Chromatography. Spot 5 μ L each of the sample solution and the standard solution on a plate of silica gel for thin-layer chromatography. Develop the plate with a mixture of diethyl ether, ethanol (95) and acetic acid (100) (40:10:1) to a distance of about 10 cm, and air-dry the plate. Examine under ultraviolet light (main

wavelength: 365 nm): the spots from the sample solution and the standard solution exhibit a blue fluorescence and show the same *R_f* value.

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

Adhesive Plaster

絆創膏

Method of preparation Adhesive Plaster consists of a mixture of carefully selected rubber, resins, zinc oxide and other substances. It has adhesive properties. It spreads evenly on a fabric.

Description The surface of Adhesive Plaster is whitish in color and adheres well to the skin.

Purity Plaster mass—The back of the fabric is free from plaster mass. When unrolled, no large amount of the plaster mass moves to the back of the next fabric. When removed from the skin, no large amount of the plaster remains on the skin.

Shape It is usually rectangular. The length is not less than 98% of the labeled length. Measure the width at 5 suitable separated locations of the plaster: the average of the 5 measurements is not less than 94% of the labeled width.

Tensile strength Cut a strip parallel with the warp, 12 mm in standard width, about 200 mm in length, allow to stand at ordinary temperature for 4 hours in a desiccator, previously saturated with the vapor over a saturated sodium nitrite solution. Using a pendulum-type testing machine, set the target distance to 150 mm, and nip firmly with a clamp whose width is between 25 mm and 50 mm. Pull it at the rate of 300 mm per minute and measure the maximum breaking load: the average of measurements of 10 samples is not less than 7.5 kg. When the width is narrower than the standard width, calculate with the necessary correction.

Adhesive strength Cut a strip parallel with the warp, 12 mm in standard width, about 250 mm in length, and apply quickly one end of the strip 12 mm in width and 125 mm in length to a test plate made of phenol resin about 25 mm in width, 125 mm in length and 5 mm in thickness, previously kept in a thermostat at 37°C for 30 minutes. At once pass a rubber roller, 850 g in mass, twice over Adhesive Plaster at a rate of 300 mm per minute. Leave it in a thermostat at 37°C for 30 minutes, fold back the free edge of the strip attached to the test plate at an angle of 180°, and peel about 25 mm from the edge of the test plate. Using a pendulum-type testing machine, nip firmly the free edge with the upper clamp and the test plate with the lower clamp. Peel off successively at a rate of 300 mm per minute, and measure the load in 4 trials at intervals of about 20 mm: the average is not less than 150 g. When the width is narrower than the standard width, calculate with the necessary correction.

Containers and storage Containers—Well-closed containers.

Storage—Light-resistant.