



Edition: BP 2025 (Ph. Eur. 11.6 update)

Heavy Kaolin



[General Notices](#)

(Ph. Eur. monograph 0503)

Preparation

[Kaolin Poultice](#)

When kaolin is prescribed or demanded, Light Kaolin shall be dispensed or supplied, unless it is ascertained that Light Kaolin (Natural) is required.

Ph Eur

DEFINITION

Purified, natural, hydrated aluminium silicate of variable composition.

CHARACTERS

Appearance

Fine, white or greyish-white, unctuous powder.

Solubility

Practically insoluble in water and in organic solvents.

IDENTIFICATION

- A. To 0.5 g in a metal crucible add 1 g of [potassium nitrate R](#) and 3 g of [sodium carbonate R](#) and heat until the mixture melts. Allow to cool. To the residue add 20 mL of boiling [water R](#), mix and filter. Wash the residue with 50 mL of [water R](#). To the residue add 1 mL of [hydrochloric acid R](#) and 5 mL of [water R](#). Filter. To the filtrate add 1 mL of [strong sodium hydroxide solution R](#) and filter. To the filtrate add 3 mL of [ammonium chloride solution R](#). A gelatinous white precipitate is formed.
- B. Add 2.0 g in 20 portions to 100 mL of a 10 g/L solution of [sodium laurilsulfate R](#) in a 100 mL graduated cylinder about 30 mm in diameter. Allow 2 min between additions for each portion to settle. Allow to stand for 2 h. The apparent volume of the sediment is not greater than 5 mL.
- C. 0.25 g gives the reaction of silicates ([2.3.1](#)).

TESTS

Solution S

To 4 g add a mixture of 6 mL of [acetic acid R](#) and 34 mL of [distilled water R](#), shake for 1 min and filter.

Acidity or alkalinity

To 1.0 g add 20 mL of [carbon dioxide-free water R](#), shake for 2 min and filter. To 10 mL of the filtrate add 0.1 mL of [phenolphthalein solution R](#). The solution is colourless. Not more than 0.25 mL of [0.01 M sodium hydroxide](#) is required to change the colour of the indicator to pink.

Organic impurities

Heat 0.3 g to redness in a calcination tube. The residue is only slightly more coloured than the original substance.

Adsorption power

To 1.0 g in a ground-glass-stoppered test-tube add 10.0 mL of a 3.7 g/L solution of [methylene blue R](#) and shake for 2 min. Allow to settle. Centrifuge and dilute the solution 1 to 100 with [water R](#). The solution is not more intensely coloured than a 0.03 g/L solution of [methylene blue R](#).

Swelling power

Triturate 2 g with 2 mL of [water R](#). The mixture does not flow.

Substances soluble in dilute hydrochloric acid

Maximum 1 per cent.

To 5.0 g add 7.5 mL of [dilute hydrochloric acid R](#) and 27.5 mL of [water R](#) and boil for 5 min. Filter, wash the residue on the filter with [water R](#) and dilute the combined filtrate and washings to 50.0 mL with [water R](#). To 10.0 mL of the solution add 1.5 mL of [dilute sulfuric acid R](#), evaporate to dryness on a water-bath and ignite. The residue weighs a maximum of 10 mg.

Chlorides ([2.4.4](#))

Maximum 250 ppm.

Dilute 2 mL of solution S to 15 mL with [water R](#).

Sulfates ([2.4.13](#))

Maximum 0.1 per cent.

Dilute 1.5 mL of solution S to 15 mL with [distilled water R](#).

Calcium ([2.4.3](#))

Maximum 250 ppm.

Dilute 4 mL of solution S to 15 mL with [*distilled water R*](#).

Microbial contamination

TAMC: acceptance criterion 10^3 CFU/g ([2.6.12](#)).

TYMC: acceptance criterion 10^2 CFU/g ([2.6.12](#)).

LABELLING

The label states, where applicable, that the substance is suitable for internal use.

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