

**Hard paraffin (Paraffinum durum)**

**Chemical name.** Paraffin wax; paraffin waxes and hydrocarbon waxes; CAS Reg. No. 8002-74-2.

**Description.** A colourless or white, slightly unctuous mass showing a crystalline structure; odourless.

**Solubility.** Practically insoluble in water and ethanol (~750 g/l) TS; freely soluble in ether R.

**Category.** Ointment base; viscosity-increasing agent.

**Storage.** Hard paraffin should be kept in a well-closed container.

**Additional information.** Congealing point, within 47-65 °C.

**Requirements**

**Definition.** Hard paraffin is a purified mixture of solid hydrocarbons obtained from petroleum.

**Identity tests**

A. Melt 2 g until a homogeneous mass is obtained and immediately add 2 mL of water and 0.2 mL of iodine (0.1 mol/l) VS. Heat; as soon as two liquid phases are obtained, shake and cool; the upper solid phase has a pinkish violet colour.

B. Heat a small quantity of Hard paraffin and ignite; a luminous flame is observed and a deposit of carbon is formed.

**Sulfated ash.** Not more than 1.0 mg/g.

**Acidity or alkalinity.** Boil 5 g with 10 mL of ethanol (~710 g/l) TS previously neutralized to litmus TS, cool, and add a few drops of litmus TS; the solution is neutral (violet).