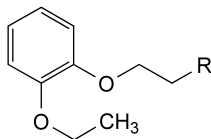
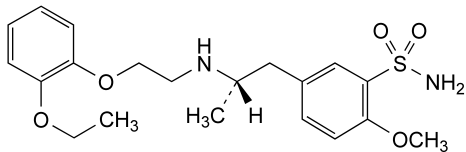


E. 5-formyl-2-methoxybenzenesulfonamide,



F. R = NH₂: 2-(2-ethoxyphenoxy)ethanamine,

I. R = Br: 1-(2-bromoethoxy)-2-ethoxybenzene,



G. 5-[(2S)-2-[[2-(2-ethoxyphenoxy)ethyl]amino]propyl]-2-methoxybenzenesulfonamide.

01/2008:1477
corrected 6.0

TANNIC ACID

Tanninum

DEFINITION

Mixture of esters of glucose with gallic acid and 3-galloylgallic acid.

CHARACTERS

Appearance: yellowish-white or slightly brown amorphous light powder or shiny plates.

Solubility: very soluble in water, freely soluble in acetone, in ethanol (96 per cent) and in glycerol (85 per cent), practically insoluble in methylene chloride.

IDENTIFICATION

- Dilute 0.1 ml of solution S (see Tests) to 5 ml with *water R*. Add 0.1 ml of *ferric chloride solution R1*. A blackish-blue colour is produced which becomes green on the addition of 1 ml of *dilute sulphuric acid R*.
- To 1 ml of solution S, add 3 ml of a 1 g/l solution of *gelatin R*. The mixture becomes turbid and a flocculent precipitate is formed.
- Dilute 0.1 ml of solution S to 5 ml with *water R*. Add 0.3 ml of *barium hydroxide solution R*. A greenish-blue precipitate is formed.

TESTS

Solution S. Dissolve 4.0 g in *carbon dioxide-free water R* and dilute to 20 ml with the same solvent.

Appearance of solution. Solution S is not more opalescent than reference suspension II (2.2.1).

Dextrins, gum, salts, sugars. To 2 ml of solution S, add 2 ml of *ethanol (96 per cent) R*. The solution is clear. Add 1 ml of *ether R*. The solution remains clear for at least 10 min.

Resins. To 5 ml of solution S, add 5 ml of *water R*. The mixture remains clear (2.2.1) for at least 15 min.

Loss on drying (2.2.32): maximum 12.0 per cent, determined on 0.200 g by drying at 105 °C.

Sulphated ash (2.4.14): maximum 0.1 per cent, determined on 1.0 g.

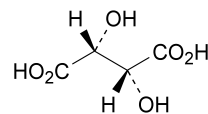
STORAGE

Protected from light.

01/2008:0460
corrected 6.0

TARTARIC ACID

Acidum tartaricum



C₄H₆O₆
[87-69-4]

M_r 150.1

DEFINITION

(2R,3R)-2,3-Dihydroxybutanedioic acid.

Content: 99.5 per cent to 101.0 per cent (dried substance).

CHARACTERS

Appearance: white or almost white, crystalline powder or colourless crystals.

Solubility: very soluble in water, freely soluble in ethanol (96 per cent).

IDENTIFICATION

- Solution S (see Tests) is strongly acid (2.2.4).
- It gives the reactions of tartrates (2.3.1).

TESTS

Solution S. Dissolve 5.0 g in *distilled water R* and dilute to 50 ml with the same solvent.

Appearance of solution. Solution S is clear (2.2.1) and not more intensely coloured than reference solution Y₆ (2.2.2, *Method II*).

Specific optical rotation (2.2.7): + 12.0 to + 12.8 (dried substance).

Dissolve 5.00 g in *water R* and dilute to 25.0 ml with the same solvent.

Oxalic acid: maximum 350 ppm, calculated as anhydrous oxalic acid.

Dissolve 0.80 g in 4 ml of *water R*. Add 3 ml of *hydrochloric acid R* and 1 g of *zinc R* in granules and boil for 1 min. Allow to stand for 2 min. Collect the liquid in a test-tube containing 0.25 ml of a 10 g/l solution of *phenylhydrazine hydrochloride R* and heat to boiling. Cool rapidly, transfer to a graduated cylinder and add an equal volume of *hydrochloric acid R* and 0.25 ml of a 50 g/l solution of *potassium ferricyanide R*. Shake and allow to stand for 30 min. Any pink colour in the solution is not more intense than that in a standard prepared at the same time in the same manner using 4 ml of a 0.1 g/l solution of *oxalic acid R*.

Chlorides (2.4.4): maximum 100 ppm.

Dilute 5 ml of solution S to 15 ml with *water R*.