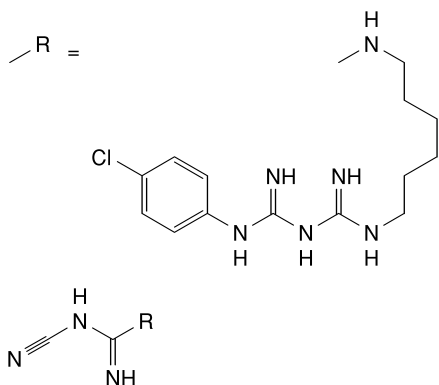
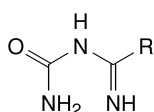


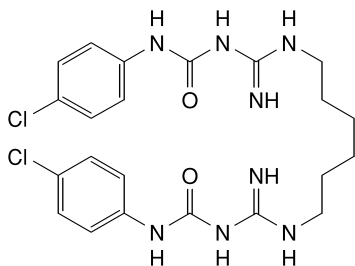
IMPURITIES



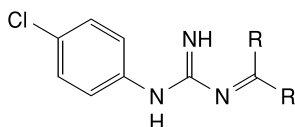
- A. 1-(4-chlorophenyl)-5-[6-(3-cyanoguanidino)hexyl]-biguanide,



- B. [[[6-[5-(4-chlorophenyl)guanidino]hexyl]amino]imino-methyl]urea,



- C. 1,1'-[hexane-1,6-diylbis[imino(iminocarbonyl)]]bis[3-(4-chlorophenyl)urea],



- D. 1,1'-[[[[[(4-chlorophenyl)amino]iminomethyl]imino]-methylene]bis[imino(hexane-1,6-diyl)]]bis[5-(4-chlorophenyl)biguanide].

DEFINITION

1,1,1-Trichloro-2-methylpropan-2-ol.

Content: 98.0 per cent to 101.0 per cent (anhydrous substance).

CHARACTERS

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

Solubility: slightly soluble in water, very soluble in ethanol (96 per cent), soluble in glycerol (85 per cent).

mp: about 95 °C (without previous drying).

IDENTIFICATION

A. Add about 20 mg to a mixture of 1 ml of *pyridine R* and 2 ml of *strong sodium hydroxide solution R*. Heat in a water-bath and shake. Allow to stand. The pyridine layer becomes red.

B. Add about 20 mg to 5 ml of *ammoniacal silver nitrate solution R* and warm slightly. A black precipitate is formed.

C. To about 20 mg add 3 ml of 1 M *sodium hydroxide* and shake to dissolve. Add 5 ml of *water R* and then, slowly, 2 ml of *iodinated potassium iodide solution R*. A yellowish precipitate is formed.

D. Water (see Tests).

TESTS

Solution S. Dissolve 5 g in *ethanol (96 per cent) R* and dilute to 10 ml with the same solvent.

Appearance of solution. Solution S is not more opalescent than reference suspension II (2.2.1) and not more intensely coloured than reference solution BY₅ (2.2.2, *Method II*).

Acidity. To 4 ml of solution S add 15 ml of *ethanol (96 per cent) R* and 0.1 ml of *bromothymol blue solution R1*. Not more than 1.0 ml of 0.01 M *sodium hydroxide* is required to change the colour of the indicator to blue.

Chlorides (2.4.4): maximum 300 ppm.

Dissolve 0.17 g in 5 ml of *ethanol (96 per cent) R* and dilute to 15 ml with *water R*. When preparing the standard, replace the 5 ml of *water R* by 5 ml of *ethanol (96 per cent) R*.

Water (2.5.12): maximum 1.0 per cent, determined on 2.00 g.

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

ASSAY

Dissolve 0.100 g in 20 ml of *ethanol (96 per cent) R*. Add 10 ml of *dilute sodium hydroxide solution R*, heat in a water-bath for 5 min and cool. Add 20 ml of *dilute nitric acid R*, 25.0 ml of 0.1 M *silver nitrate* and 2 ml of *dibutyl phthalate R* and shake vigorously. Add 2 ml of *ferric ammonium sulphate solution R2* and titrate with 0.1 M *ammonium thiocyanate* until an orange colour is obtained.

1 ml of 0.1 M *silver nitrate* is equivalent to 5.92 mg of C₄H₇Cl₃O.

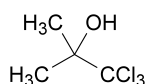
STORAGE

In an airtight container.

01/2008:0382
corrected 6.0

CHLOROBUTANOL, ANHYDROUS

Chlorobutanolum anhydricum



C₄H₇Cl₃O
[57-15-8]

M_r 177.5