KEY TO MONOGRAPHS

Version date of the text

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corrected 10.0

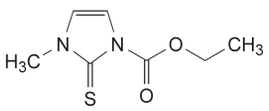
Text reference number

Modification to be taken into account as soon as possible and not later than the end of the month following the month of publication of Ph. Eur. 10.0 (see section IV. Contents of the 10th Edition)

Link to further information on the text (e.g. Knowledge database) for smartphones/tablets with camera and barcode reader app

CARBIMAZOLE(1)

Carbimazolum



$C_7H_{10}N_2O_2S$

[22232-54-8] M_r 186.2

CAS number

DEFINITION

Ethyl 3-methyl-2-thioxo-2,3-dihydro-1*H*-imidazole-1-carboxylate.

Chemical name in accordance with IUPAC nomenclature rules

Content: 98.0 per cent to 102.0 per cent (dried substance).

♦CHARACTERS

For the meaning of black and white diamonds see chapter 5.8. Pharmacopoeial harmonisation

Appearance: white or yellowish-white, crystalline powder.

Solubility: slightly soluble in water, soluble in acetone and in ethanol (96 per cent). ♦

IDENTIFICATION

First identification: B.

Second identification: A, C.

Application of the first and second identification is defined in the General Notices (chapter 1)

◊A. Melting point (*2.2.14*): 122 °C to 125 °C.◊

B. Infrared absorption spectrophotometry (*2.2.24*).

Preparation: discs.

Comparison: *carbimazole CRS*

Reference standard available from the EDQM (see http://crs.edqm.eu)

C. Thin-layer chromatography (*2.2.27*).

Test solution. Dissolve 10 mg of the substance to be examined in *methylene chloride R* and dilute to 10 mL with the same solvent.

Reagent described in chapter 4

Reference solution. Dissolve 10 mg of *carbimazole CRS* in *methylene chloride R* and dilute to 10 mL with the same solvent.

Plate: *TLC silica gel GF_{254} plate R*

Mobile phase: *acetone R*, *methylene chloride R* (20:80 *V/V*).

Further information on certain reagents available in the Knowledge database (http://go.edqm.eu/knowledge)

Application: 10 µL.

Development: over 3/4 of the plate.

Drying: in air for 30 min.

Vertical line in the margin indicating where the text has been modified

Detection: examine in ultraviolet light at 254 nm.

Results: the principal spot in the chromatogram obtained with the test solution is similar in position and size to the principal spot in the chromatogram obtained with the reference solution.

Horizontal line in the margin indicating where part of the text has been deleted

TESTS

Related substances. Liquid chromatography (*2.2.29*).

Reference to a general chapter

Test solution. Dissolve 5.0 mg of the substance to be examined in 10.0 mL of a mixture of 20 volumes of *acetonitrile R* and 80 volumes of *water R*. Use this solution within 5 min of preparation.

(1) This monograph has undergone pharmacopoeial harmonisation. See chapter 5.8. *Pharmacopoeial harmonisation.*