


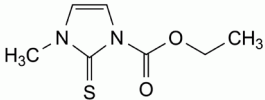
KEY TO MONOGRAPHS

Carbimazole

EUROPEAN PHARMACOPOEIA 11.0



CARBIMAZOLE⁽¹⁾
Carbimazolium



$C_7H_{10}N_2O_2S$
[22232-54-8] M_r 186.2

DEFINITION

Ethyl 3-methyl-2-thioxo-2,3-dihydro-1H-imidazole-1-carboxylate.
Content: 98.0 per cent to 102.0 per cent (dried substance).

CHARACTERS

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.

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

B. Infrared absorption spectrophotometry (2.2.24).
Preparation: discs.
Comparison: carbimazole CRS.

◊ 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.
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 GF₂₅₄ plate R.
Mobile phase: acetone R, methylene chloride R (20:80 V/V).
Application: 10 µL.
Development: over 3/4 of the plate.
Drying: in air for 30 min.
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. ◊

TESTS

Related substances. Liquid chromatography (2.2.29).
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.

Version date of the text

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. 11.0

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

Footnote mainly for harmonised texts

CAS number

Chemical name in accordance with IUPAC nomenclature rules

Black and white diamonds appear in harmonised texts only. See chapter 5.8. *Pharmacopoeial harmonisation* for more information

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

Reference standard available from the EDQM (see <https://crs.edqm.eu>)

Reagent described in chapter 4

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

Reference to a general chapter

Footnote is mainly included for harmonised texts

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

See the information section on general monographs (cover pages)

General Notices (1) apply to all monographs and other texts