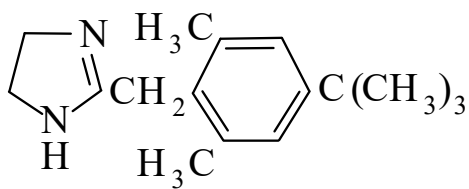




>>Entry Name: Xylometazoline, BAN, INN

Synonym(s): 2-[[4-(1,1-Dimethylethyl)-2,6-dimethylphenyl]methyl]-4,5-dihydro-1H-imidazole, 9Cl. 2-(4-*tert*-Butyl-2,6-dimethylbenzyl)-2-imidazoline. Ba 11391



CAS Registry Number: 526-36-3

Molecular Formula: C₁₆H₂₄N₂

Molecular Weight: 244.379

Accurate Mass: 244.193948

Percentage Composition: C 78.64%; H 9.90%; N 11.46%

Use/Importance: α -Adrenoceptor agonist. Vasoconstrictor, nasal decongestant

Physical Description: Cryst. (C₆H₆/petrol)

Melting Point: Mp 131-133°

Solubility: Mod. sol. H₂O

Calculated Log P Data: Log P 5.38 (calc)

Hazard & Toxicity: LD₅₀ (mus, orl) 215 mg/kg

>>Derivative: Hydrochloride

Synonym(s): Xylometazoline hydrochloride, USAN. Novorin. Olynth. Otrivine. Otrix. Galazolin. Many other names

CAS Registry Number: 1218-35-5

Use/Importance: Used as 0.01M aq. soln. for extraction-photometric detn. of V(*V*) ($\lambda_{\max}$ 540 nm, ϵ 45600), Cr(*III*) ($\lambda_{\max}$ 530 nm, ϵ 48000, CHCl₃)

Physical Description: Cryst.

Melting Point: Mp 327-329 dec.°

Solubility: Sol. H₂O

Hazard & Toxicity: LD₅₀ (rat, orl) 230 mg/kg

References:

- Anjaneyulu, Y. *et al.*, *Analyst (London)*, 1955, **111**, 1167, (*detn, Cr*)
U.S. Pat., 1959, 2 868 802; *CA*, **53**, 10253
Boon, P.F.G. *et al.*, *J. Pharm. Pharmacol., Suppl.*, 1967, **19**, 88, (*glc*)
Mollica, J.A. *et al.*, *Anal. Chem.*, 1973, **45**, 1859, (*hplc*)
Golander, Y. *et al.*, *Anal. Profiles Drug Subst.*, 1985, **14**, 135, (*rev, synth, pharmacol, anal*)
Ghose, S. *et al.*, *Acta Cryst. C*, 1986, **42**, 1524, (*cryst struct*)
Yerramilli, A. *et al.*, *Anal. Chem.*, 1986, **58**, 1451, (*detn, V*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th edn., Akademie-Verlag, 1987, 4150
Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, 1993, 1259
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, OKO500