



Journal of Applicable Chemistry

2013, 2 (1): 50-54

(International Peer Reviewed Journal)



ZnCl₂-SiO₂ Catalyzed solvent free synthesis of Benzimidazole derivatives under Microwave irradiation.

Mahajan.Tushar¹, Kaneria Dhimant², Kapse. G.K³, M.H. Hugar⁴

1. Department of Pharmacy, NIMS University, Jaipur, Rajasthan, India
2. Noble college of Pharmacy, Junagadh , Gujrat, India
3. Luqman college of Pharmacy, Gulbarga ,Karnataka, India
4. Luqman college of Pharmacy, Gulbarga, Karnataka, India

Email: mahajan.tushar2020@gmail.com

Received on 03rd January and finalized on 15th January 2013

ABSTRACT

An expeditious synthesis of Synthesis of Various benzimidazole derivatives under micro-wave irradiation from simple and substituted ortho phenylenediamines (OPDA) with various arylaldehydes using zncl₂/sio₂ as catalyst is described and proceeds efficiently in the absence of organic solvent under thermal condition and microwave irradiation with high yields. The structure of synthesized compounds have been established on the basis of spectral and analytical data.

Keywords: Benzimidazole , OPD, ZnCl₂, Silicon Dioxide, Solvent Free.
