

SUMMARY

Phthaloyl azide (I) was used to prepare N-substituted carbamoyl benzimidazolones (III) via the base-catalyzed decomposition with amines, (II a-a), p-aminobenzoic acid (II h), and hydrazines (II i, and j).

Mass Spectra for (III) were presented, and discussed (cf. Charts 24, and 7).

Mass Spectra of benzimidazolone and p-anisylisocyanate (VI s) revealed that they were formed as intermediates during the fragmentation of (III).

The hitherto unknown reaction of aryl azides (VII a-e) with phthalic anhydride in pyridine base, was used to prepare N-arylphthalimides (VII a-e). Mass Spectra of (VIII g) were presented, and discussed.

A new acid-catalyzed double route decomposition of aryl azides (VII a-f) in a mixture of (p.p.A./carboxylic acid) gives a mixture of acids (XVII a-f), and anilides (XVIII a-1). Cinnamoyl azide (VII g) under the same conditions gives cinnamic acid (XVII g), and phenyl acetaldehyde.

o-Aroyl benzazides (XXVIII E-ci) react with (P.P.A./carboxylic acid, or HBr/AcOH acid) to give a mixture of o-aryloxy-benzoic acids (XXIX a-d) and aroyl anthranilic acids (XX a-d)

The hitherto unknown acid-catalyzed decomposition of aroyl azides in a mixture of Filar/AOOH gives acids (XVII a-e) and amine hydrobromides (XXAII)