days at 25° compared to dilution with distilled water.

The 10 mEq of potassium chloride/15-ml dilution does not have an objectionable taste and could be suitably flavored to produce an acceptable pharmaceutical product. The OTC Antacid Review Panel report (3) stated that potassium presents no problem to normal persons, but that products containing 25 mEq or more of potassium per maximum daily dose must include a warning to patients with kidney disease. Thus, a vehicle designed to maintain the stabilizing ions in the aluminum hydroxide gel appears to be a feasible approach to improving the stability of aluminum hydroxide gel.

(1) N. J. Kerkhof, J. L. White, and S. L. Hem, *J. Pharm. Sci.*, **64**, 940(1975).

(2) W. H. Steinberg, H. H. Hutchins, P. G. Pick, and J. S. Lazar, *ibid.*, **54**, 625(1965).

(3) *Fed. Reg.*, 38 (65), 8714(Apr. 5, 1973).

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BOOKS

REVIEWS

Alicyclic Chemistry, Volume 2—A Review of the Literature Published during 1972. Senior Reporter, W. PARKER. The Chemical Society, Burlington House, London WIV OBN, England, 1974. 470 pp. 14 × 22 cm. Price $35.

This book is part of a series of 32 Specialist Periodical Reports designed, according to the Chemical Society, to give an in-depth coverage of the whole field of chemistry. Ultimately some 40 titles are contemplated. The first volume was published in three reports covering aliphatic, alicyclic, and saturated heterocyclic chemistry from January 1970 to December 1971. Other reports of interest to medicinal chemists are: Aliphatic Chemistry, Saturated Heterocyclic Chemistry, Aromatic and Heteroaromatic Chemistry, Organic Compounds of Sulfur, Selenium and Tellurium (all Volume 2), and Organophosphorous Chemistry, already up to Volume 5.

The present volume consists of four chapters. Chapter 1 covers three- and four-membered rings. The first 10 pages are devoted to theoretical and structural considerations including X-ray studies, MO calculations, and energetics. The remainder of the chapter is divided into syntheses and reactions of three- and four-membered carbocyclic compounds. The coverage is thorough. The reactions considered include those with electrophiles, nucleophiles, thermal reactions, cycloadditions, rearrangements, eliminations, functional group modifications, and radicals. Chapter 2 views five- and six-membered rings in light of structural and conformational considerations, followed by an in-depth overview of their reactivities. A 10-page section also considers fused rings. Thus, the reactions of decalyl tosylates and amines are described in terms of acetolyses, deaminations leading to twist conformers, and ring contractions. Bicyclo[4.3.0]nonane and bicyclo[4.2.0]octane systems are also discussed.

Chapter 3 is devoted to medium and large ring compounds. It has 16 sections. Energies and conformations of seven- to 10-membered rings are covered, followed by synthetic routes to such systems. Intramolecular photochemical electrocyclic and cycloaddition reactions, as well as intermolecular photochemical reactions, are surveyed. Transannular reactions, ring contractions, and ring-opening reactions are briefly covered. Finally there is a section on general reactions, *e.g.*, of cycloalkenes, cyclic ketones, amines, alcohols, and esters. Organometallic derivatives complete the chapter.

The final chapter is titled Bridge Carbocyclics. A lengthy introductory section discusses physical methods and energy calculations. This is followed by a section on bicyclic and polycyclic structures. Of particular interest to medicinal chemists are some references to bornane chemistry and extensive coverage (11 pages) of adamantanes. Extensions of known methods of syntheses for this carbon skeleton are reported. The chapter further details cycloadditions, photo- and organometallic chemistry, and solvolytic reactions. Finally, several miscellaneous reactions, including a new stereospecific reducing agent (lithium tris-s-butyl borohydride) and an enzymatic reduction (horse liver dehydrogenase and NADH), are referred to. An author index is included.

The book is profusely endowed with structural formulas; the reader need not fumble with vast quantitites of IUC nomenclature. Its value to the medicinal chemist would be mainly as an adjunct reference source for new developments in those alicyclic ring systems of potential biological interest either as pharmacophores (adamantanes) or as useful carriers for such groups.

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