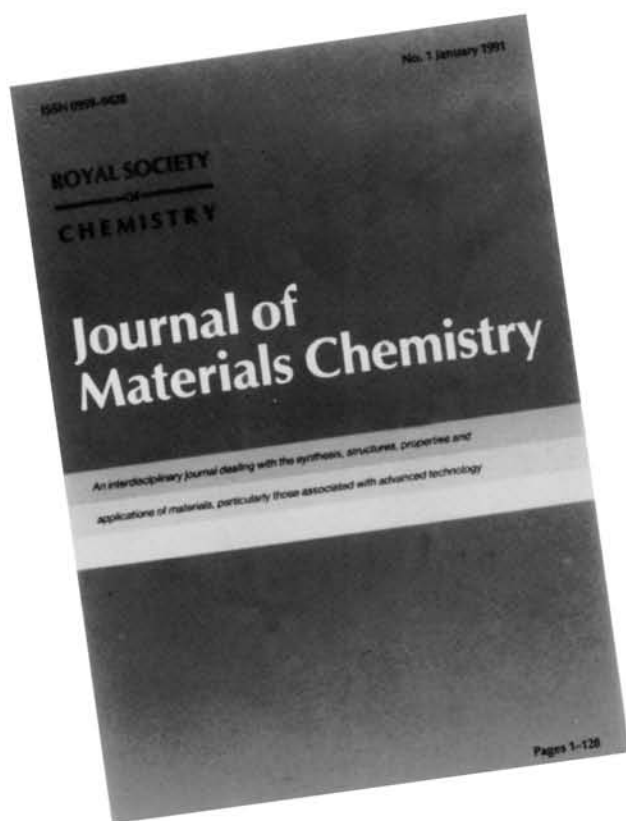


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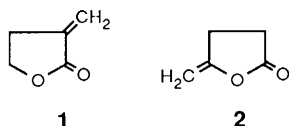
Information
Services



Furanone Derivatives

The ubiquitous γ -lactone (furanone) skeleton, in the parent or derived form, appears in a diverse range of products from pheromones to polymers and from enzyme inhibitors to (capacitor) electrolytes. Consequently, furanone derivatives serve as useful raw materials in various organic/biochemical processes. Chiral furanone derivatives, which have played an increasingly pivotal role as building blocks for asymmetric synthesis, are primarily derived from natural sources such as carbohydrates or amino acids. Aldrich offers a number of achiral and chiral furanones, as well as dihydrofuranone and 4-hydroxyfuranone (tetronic acid) derivatives which are represented below. For a complete listing, please see the Aldrich Catalog/Handbook. If you don't find what you are looking for, call us with your custom synthesis requests at 800-255-3756.

FURANONES



2-Carbomethoxybutadiene precursor.¹

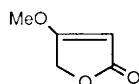
22,641-6 α -Methylene- γ -butyrolactone, 97% (1) 1g \$24.60; 5g \$85.80
27,300-7 γ -Methylene- γ -butyrolactone, 99% (2) 250mg \$10.50; 1g \$30.00



Synthesis of intermediates for drugs, polymers and plasticizers.²

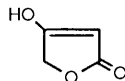
28,375-4 2(5H)-Furanone, 98%
1g \$20.50; 5g \$68.35

TETRONIC ACIDS



Piperolizide, fadyenolide synthesis.³

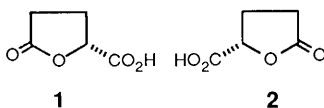
36,087-2 4-Methoxy-2(5H)-furanone, 99%
5g \$19.00; 25g \$64.00



Aflatoxin synthesis.⁴ Non-aqueous alkaline batteries.⁵

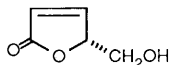
25,459-2 Tetronic acid, 98%
5g \$12.10; 25g \$39.60

CHIRAL FURANONES



Chiral derivatizing agent,⁶ peptide and leukotriene synthesis.^{7,8}

31,047-6 (R)-(-)-5-Oxo-2-tetrahydrofuran-2-carboxylic acid, 98% (1)
1g \$15.75; 5g \$52.50
30,146-9 (S)-(+)-5-Oxo-2-tetrahydrofuran-2-carboxylic acid, 98% (2)
1g \$12.90; 5g \$41.80



Polypropionate synthesis.⁹ Chiral dienophile.¹⁰

34,686-1 (S)-(-)-5-(Hydroxymethyl)-2(5H)-furanone, 98%
250mg \$15.00
1g \$42.00

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DIHYDROFURANONES



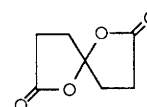
Pheromone,¹¹ terpene,¹² nucleoside¹³ synthesis.

11,775-7 α -Methyl- γ -butyrolactone, 98%
5g \$18.40; 25g \$67.00
100g \$175.35



Used in the preparation of medicinally important compounds.¹⁴

B5,960-8 α -Bromo- γ -butyrolactone, 97%
25g \$16.40; 100g \$50.50



Resin compositions.¹⁵ Heat-resistant polymers.¹⁶

27,197-7 1,6-Dioxaspiro[4.4]nonane-2,7-dione, 98%
5g \$21.40; 25g \$70.60



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