**PRODUCT INFORMATION**

**Glipizide**

*Item No. 11579*

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**CAS Registry No.:** 29094-61-9  
**Formal Name:** N-[2-[4-[[[(cyclohexylamino)carbonyl]amino]sulfonyl]phenyl]ethyl]-5-methyl-2-pyrazinecarboxamide  
**Synonyms:** Aldiab, CP 28720, Digrin, Glucotrol, K 4024, Ozidia, TK 1320  
**MF:** C_{21}H_{27}N_{5}O_{4}S  
**FW:** 445.5  
**Purity:** ≥98%  
**UV/Vis.:** λ_{max}: 227, 275 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

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**Laboratory Procedures**

**Glipizide** is supplied as a crystalline solid. A stock solution may be made by dissolving the glipizide in the solvent of choice. Glipizide is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of glipizide in these solvents is approximately 20 mg/ml.

Glipizide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, glipizide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Glipizide has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

**Description**

Glipizide is a short-acting, second-generation, blood-glucose-lowering agent belonging to the sulfonylurea class that increases the release of endogenous insulin from β-cells by blocking potassium channels.¹ The drug-formulated version of Glipizide, marketed as Glucotrol or under generic label, is most commonly prescribed to lower blood sugar levels in type 2 diabetes (non-insulin-dependent diabetes mellitus). It is a weak acid (pK_{a} = 5.9) that is better absorbed in acidic medium.² However, its aqueous solubility is limited at very low pH values, causing large variations in bioavailability.²

**References**