

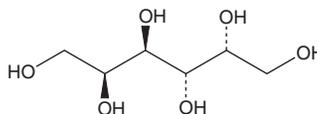
PRODUCT INFORMATION



Galactitol

Item No. 25023

Formal Name: Galactitol
CAS Registry No.: 608-66-2
Synonyms: Dulcitol, NSC 1944
MF: C₆H₁₄O₆
FW: 182.2
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Galactitol is supplied as a crystalline solid. Aqueous solutions of galactitol can be prepared by directly dissolving the crystalline solid in aqueous buffers. Galactitol is slightly soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Galactitol is a reduced form of galactose (Item No. 20890) that has been found in various plants, including *C. aculeatus*.¹ It is a toxic metabolite of galactose in humans that accumulates in the lens of patients with galactokinase deficiency-induced galactosemia, leading to cataract formation.² Galactitol also accumulates in a transgenic mouse model of galactokinase deficiency, however, it does not lead to the formation of cataracts even with administration of a high-galactose diet.³

References

1. Tang, W.-H., Bai, S.-T., Tong, L., *et al.* Chemical constituents from *Celastrus aculeatus* Merr. *Biochem. System. Ecol.* **54**, 78-82 (2014).
2. Lai, K., Elsas, L.J., and Wierenga, K.J. Galactose toxicity in animals. *IUBMB Life* **61**(11), 1063-1074 (2009).
3. Ai, Y., Zheng, Z., O'Brein-Jenkins, A., *et al.* A mouse model of galactose-induced cataracts. *Hum. Mol. Genet.* **9**(12), 1821-1827 (2000).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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