PRODUCT INFORMATION



Sucralose

Item No. 31621

CAS Registry No.: 56038-13-2

Formal Name: 1,6-dichloro-1,6-dideoxy-β-D-

fructofuranosyl 4-chloro-4-deoxy-

 α -D-galactopyranoside

MF: C₁₂H₁₉Cl₃O₈ 397.6 FW: ≥95% **Purity:**

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

Sucralose is supplied as a crystalline solid. A stock solution may be made by dissolving the sucralose in the solvent of choice, which should be purged with an inert gas. Sucralose is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of sucralose in these solvents is approximately 30 mg/ml. Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of sucralose can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of sucralose in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Sucralose is a synthetic disaccharide and non-caloric sweetener.^{1,2} It is not readily metabolized in humans and has been found as a contaminant in wastewater.² Formulations containing sucralose reduce Bifidobacterium, Lactobacillus, Bacteroides, and Clostridium bacterial counts in the gastrointestinal tract and increase fecal pH in rats.¹

References

- 1. Schiffman, S.S. and Rother, K.I. Sucralose, a synthetic organochlorine sweetener: overview of biological issues. J. Toxicol. Environ. Health B. Crit. Rev. 16(7), 399-451 (2013).
- 2. Tollefsen, K.E., Nizzetto, L., and Huggett, D.B. Presence, fate and effects of the intense sweetener sucralose in the aquatic environment. Sci. Total Environ. 438, 510-516 (2012).

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

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.

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