# PRODUCT INFORMATION



## Cromolyn (sodium salt hydrate)

Item No. 21379

Formal Name: 5,5'-((2-hydroxypropane-1,3-diyl)bis(oxy))

bis(4-oxo-4H-chromene-2-carboxylate)

sodium hydrate

MF: C<sub>23</sub>H<sub>14</sub>O<sub>11</sub> • 2Na [XH<sub>2</sub>O]

512.3 FW: **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 222, 239, 326 nm A crystalline solid Supplied as: Storage: Room temperature

Stability: ≥4 years

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

#### **Laboratory Procedures**

Cromolyn (sodium salt hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the cromolyn (sodium salt hydrate) in the solvent of choice. Cromolyn (sodium salt hydrate) is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 1 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 cromolyn (sodium salt hydrate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of cromolyn (sodium salt hydrate) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Cromolyn is a chromone complex that acts as a mast cell stabilizer, preventing the release of histamine. Its mechanism of action is thought to involve an interference with the antigen-stimulated calcium transport across the mast cell membrane, thereby inhibiting mast cell release of histamine, leukotrienes, and other substances that cause hypersensitivity reactions. 1,2

### References

- 1. Shishibori, T., Oyama, Y., Matsushita, O., et al. Three distinct anti-allergic drugs, amlexanox, cromolyn and tranilast, bind to S100A12 and S100A13 of the S100 protein family. Biochem. J. 338, 583-589 (1999).
- 2. Amin, K. The role of mast cells in allergic inflammation. Respir. Med. 106, 9-14 (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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• 2Na+ [XH<sub>2</sub>O]

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