# Solution volume effects on spontaneous chiral symmetry breaking of sodium chlorate crystals

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This study investigates the phenomenon of spontaneous chiral symmetry breaking in sodium chlorate during the process of evaporative crystallization [1]. By controlling the volume of the solution, the critical volume at which complete chiral symmetry breaking takes place was determined. This can be attributed to several factors, including the low probability of multiple nuclei forming simultaneously in a small volume, rapid consumption of surrounding sodium chlorate molecules during crystal growth, and the occurrence of secondary nucleation. This study provides a valuable and novel methodology for examining the behaviors of chiral symmetry breaking in a range of chiral nanomaterials and organic molecules.

**Reference**

[1] Bak SY, Coquerel G, Kim W-S and Park BJ. Solution volume effects on spontanoues chiral symmtery breaking of sodium chlorate crystals. J Phys Chem Lett. 2023;14:785-790.