



>>Entry Name: Sodium chlorite

ENTRY UNDER REVIEW

Synonym(s): Chlorous acid, sodium salt, 8Cl. Chloric(III) acid, sodium salt

CAS Registry Number: 7758-19-2

NaClO₂

Molecular Formula: ClNaO₂

Molecular Weight: 90.441

Accurate Mass: 89.948449

Percentage Composition: Cl 39.20%; Na 25.42%; O 35.38%

Source/Synthesis: Manuf. by reaction of aq. ClO₂ with Na/Hg (<0.1% Na) or by electrolysis of aq. ClO₂ in the presence of a sodium salt

Use/Importance: Commercially available (80%). Bleaching agent for wood, cotton, polyester and other fabrics. Used in water treatment as source of chlorine dioxide

Physical Description: White monoclinic cryst., hygroscopic. Dec. on heating with evolution of O₂

Melting Point: Mp 257°

Solubility: V. sol. H₂O (39 g per 100 cm³ at 17°; 55 g per 100 cm³ at 60°)

Hazard & Toxicity: Oxidiser, toxic. Recrystallised/purified samples are explosive; should not be stored for >3 months (technical grade 79-81% more stable)

Aldrich: 24415-5

Fluka: 71390

References:

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