



>>Entry Name: Sulfurous acid, 11CI

ENTRY UNDER REVIEW

Synonym(s): Sulfuric(IV) acid (H₂SO₃). Sulfur dioxide solution

CAS Registry Number: 7782-99-2

O=S(OH)₂ or HOS(O)₂H

Molecular Formula: H₂O₃S

Molecular Weight: 82.08

Accurate Mass: 81.972465

Percentage Composition: H 2.46%; O 58.48%; S 39.07%

Use/Importance: Used as dental bleach and antiseptic. Commercially available in soln.

Physical Description: Present in aq. solns. of SO₂. Colourless, acid liq. Oxid. in air to sulfuric acid

pKa Value: pK_{a1} 1.89; pK_{a2} 7.21 (25°)

Hazard & Toxicity: Suffocating odour of SO₂. Irritant

Aldrich: 24762-6

>>Derivative: Mono-Na salt

>>Derivative: Di-Na salt

>>Derivative: Di-K salt

>>Derivative: Di-NH₄ salt

>>Derivative: Mono-Mg salt

References:

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Schmidt, M. *et al.*, *Compr. Inorg. Chem.*, Pergamon, Oxford, 1973, **2**, 878, (rev)

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