



>>Entry Name: Hydroxylamine *O*-sulfonic acid, 11Cl

Synonym(s): Hydroxylamineisomonosulfuric acid

CAS Registry Number: 2950-43-8

$\text{H}_2\text{NOS}(\text{O})_2\text{OH}$

Molecular Formula: $\text{H}_3\text{NO}_4\text{S}$

Molecular Weight: 113.094

Accurate Mass: 112.978279

Percentage Composition: H 2.67%; N 12.39%; O 56.59%; S 28.35%

Source/Synthesis: Synth. from $(\text{NH}_3\text{OH})_2\text{SO}_4$ + fuming H_2SO_4

Use/Importance: Commercially available. Versatile synth. reagent for amination, reductive amination, hydroxymethylation

Physical Description: White hygroscopic solid. Rapidly hydrol. above 25°

Melting Point: Mp 210 dec.°

Hazard & Toxicity: Corrosive

Aldrich: 22797-8

Fluka: 55495

Sigma: H0134

References:

Aldrich Library of Infrared Spectra, 3rd edn., 1981, 536B, (ir)

Inorg. Synth., 1957, **5**, 122, (synth)

Gmelin Handbook Inorg. Chem., Syst. No. 9, 1963, **B3**, 1618, (bibl)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1967, **1**, 481; 1969, **2**, 217; 1972, **3**, 156; 1974, **4**, 256; 1975, **5**, 343; 1977, **6**, 290; 1980, **8**, 250; 1981, **9**, 245; 1982, **10**, 207, (uses)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **1**, 500, (synth)