



>>Entry Name: Dihydrogen hexafluorosilicate, 9CI

Synonym(s): Hexafluorosilicic acid. Fluosilicic acid

CAS Registry Number: 16961-83-4

H_2SiF_6

Molecular Formula: $\text{F}_6\text{H}_2\text{Si}$

Molecular Weight: 144.092

Accurate Mass: 143.982995

Percentage Composition: F 79.11%; H 1.40%; Si 19.49%

General Statement: Exists in aq. soln.; when anhyd. dec. to SiF_4 + HF

Source/Synthesis: Synth. from HF + SiO_2 or from CaF_2 + H_2SO_4 ; produced industrially as a by-product of the reaction between H_2SO_4 and phosphate rocks contg. fluorided silica

Hazard & Toxicity: Severe corrosive effect on skin and mucous membrane

References:

Colton, E., *J. Chem. Educ.*, 1958, **35**, 562-563, (rev)

Brauer, G., *Handb. Prep. Inorg. Chem.*, 2nd edn., Academic Press, 1965, **1**, 214-215, (synth)