



>>Entry Name: Graphite fluoride

CAS Registry Number: 11113-63-6
CF

Molecular Formula: CF

Molecular Weight: 31.009

Accurate Mass: 30.998403

Percentage Composition: C 38.73%; F 61.27%

the C planes

Source/Synthesis: Synth. by direct fluorination of graphite at high temp.

Use/Importance: High-temp. solid lubricant. Cathode material in Li-fluoride batteries

Physical Description: Grey solid

Hazard & Toxicity: Explodes on heating

References:

Ruff, O. *et al.*, *Z. Anorg. Allg. Chem.*, 1934, **217**, 1-19, (*synth*)

Rudorff, W. *et al.*, *Z. Anorg. Allg. Chem.*, 1947, **253**, 281-296, (*cryst struct*)

Brauer, G., *Handb. Prep. Inorg. Chem.*, 2nd edn., *Academic Press*, 1965, **1**, 640-641, (*synth*)

Watanabe, N. *et al.*, *Graphite Fluorides*, Elsevier, 1987

Nakajima, T. *et al.*, *Trends Inorg. Chem.*, 1991, **2**, 91-107, (*rev*)