



>>Entry Name: Gadolinium(III) fluoride (GdF₃)

CAS Registry Number: 13765-26-9

GdF₃

Molecular Formula: F₃Gd

Molecular Weight: 214.245

Accurate Mass: 214.919308

Percentage Composition: F 26.60%; Gd 73.40%

General Statement: Has β-YF₃ struct. up to 1075°, thereafter LaF₃ struct.

Source/Synthesis: Pptd. from soln. as hydrate

Use/Importance: Used in synth. of ir-transmitting fluoride glasses

Physical Description: White solid

Melting Point: Mp 1232° (1231°)

Solubility: Insol. H₂O

Aldrich: 43216-4

Fluka: 48215

References:

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Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **1**, 254, (*synth*)
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Mioduski, S. *et al.*, *Solubility Data Ser.*, 1985, **22**, 245, (*soly*)
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