



>>Entry Name: Scandium(III) bromide (ScBr₃)

Synonym(s): Scandium tribromide

CAS Registry Number: 13465-59-3

ScBr₃

Molecular Formula: Br₃Sc

Molecular Weight: 284.668

Accurate Mass: 281.770922

Percentage Composition: Br 84.21%; Sc 15.79%

Source/Synthesis: Synth. from Sc₂O₃/HBr/NH₄Br followed by sublimation; or from ScH_{1.7} + Br₂ at 500°

Physical Description: White cryst.

Melting Point: Mp 970° (948°)

Boiling Point: Subl. 800° *in vacuo*

Solubility: Sol. H₂O

>>Derivative: Hexahydrate

Synonym(s): Scandium(III) bromide hexahydrate

CAS Registry Number: 20662-15-1

Molecular Formula: Br₃H₁₂O₆Sc

Molecular Weight: 392.759

Accurate Mass: 389.834312

Percentage Composition: Br 61.03%; H 3.08%; O 24.44%; Sc 11.45%

Physical Description: Deliquescent rhombic colourless cryst.

Solubility: Sol. H₂O

Other Data: Loses H₂O >110°, dec. at 175°. Probably [Sc(OH₂)₆]³⁽⁺⁾3Br⁽⁻⁾

References:

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