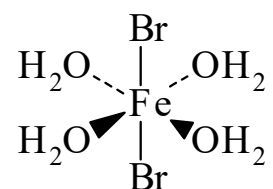




>>Entry Name: Tetraaquadibromoiron(II)

Synonym(s): Iron(II) bromide tetrahydrate. Ferrous bromide tetrahydrate



Related CAS Registry Numbers(s): 20993-34-4 20993-36-6

Molecular Formula:  $\text{Br}_2\text{FeH}_8\text{O}_4$

Molecular Weight: 287.716

Accurate Mass: 285.853871

Percentage Composition: Br 55.54%; Fe 19.41%; H 2.80%; O 22.24%

>>Variant: *trans*-form

CAS Registry Number: 20049-61-0

Molecular Formula:  $\text{Br}_2\text{FeH}_8\text{O}_4$

Molecular Weight: 287.716

Accurate Mass: 285.853871

Percentage Composition: Br 55.54%; Fe 19.41%; H 2.80%; O 22.24%

Source/Synthesis: Obt. by recryst. of  $\text{FeBr}_2$  from  $\text{H}_2\text{O}$  between  $49\text{--}83^\circ$

Physical Description: Green-blue cryst.

>>Derivative: Dihydrate

Synonym(s): Iron(II) bromide hexahydrate

CAS Registry Number: 13463-12-2

Use/Importance: Polym. catalyst

Physical Description: Deliquescent blue-green cryst., turns yellow-brown on exp. to air

Solubility: Sol.  $\text{H}_2\text{O}$ , EtOH

>>Derivative: Pentahydrate

Synonym(s): Iron(II) bromide nonahydrate

Source/Synthesis: Obt. by recryst. of  $\text{FeBr}_2$  from  $\text{H}_2\text{O}$   $< -29.3^\circ$

References:

*Gmelin Handbook Inorg. Chem., Syst. No. 59, 1929, B1, 325, (rev, bibl)*

Burbridge, C.D. *et al.*, *J.C.S.(A)*, 1968, 1410, (*Mössbauer, synth, deriv*)