



>>Entry Name: Silver telluride (Ag₂Te)

Synonym(s): Hessite

CAS Registry Number: 12002-99-2

Extra CAS Registry Numbers(s): 12002-98-1

Ag₂Te

Molecular Formula: Ag₂Te

Molecular Weight: 343.336

Accurate Mass: 343.716413

Percentage Composition: Ag 62.84%; Te 37.16%

Source/Synthesis: Occurs in nature as the mineral *Hessite*. Prepd. by heating Ag in Te vapour

Use/Importance: Commercially available

Physical Description: Black cryst. Polymorphic with transition temps. 149.5° and 800°

Melting Point: Mp 955°

Solubility: Insol. H₂O

Aldrich: 40064-5

References:

Hoenigschmid, O., *Z. Anorg. Allg. Chem.*, 1933, **214**, 281, (*synth*)

Frueh, A.J., *Z. Kristallogr.*, 1959, **112**, 44, (*cryst struct*)

Frueh, A.J., *Am. Mineral.*, 1961, **46**, 654, (*polymorphs*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **2**, 1001, (*synth*)

Sakuma, T. *et al.*, *J. Phys. Soc. Jpn.*, 1985, **54**, 3647, (*cryst struct*)