



>>Entry Name: Barium yttrium tungsten oxide ($\text{Ba}_3\text{Y}_2\text{WO}_9$)

Synonym(s): Barium yttrium oxide tungstate ($\text{Ba}_3\text{Y}_2\text{O}_3(\text{WO}_6)$)

CAS Registry Number: 37265-86-4

$\text{Ba}_3\text{Y}_2\text{O}_3(\text{WO}_6)$

Molecular Formula: $\text{Ba}_3\text{O}_9\text{WY}_2$

Molecular Weight: 917.637

Accurate Mass: 919.432557

Percentage Composition: Ba 44.90%; O 15.69%; W 20.04%; Y 19.38%

General Statement: Pure cubic perovskite

Source/Synthesis: Synth. by calcining BaCO_3 with Y_2O_3 and WO_3 (0.6:0.2:0.2) at 1200°

Use/Importance: Used as electron emitter in discharge lamps

Melting Point: Mp 1470°

Aldrich: 41517-0

References:

Ger. Pat., 1972, 2 158 584; *CA*, **77**, 81156, (*synth*)

Hikichi, Y., *Mater. Res. Bull.*, 1987, **22**, 219, (*synth*)

Japan. Pat., 1990, 02 181 352; *CA*, **114**, 73698, (*use*)