



>>Entry Name: Molybdenum phosphides

Molecular Formula: [MoP]

>>Variant: Molybdenum phosphide (Mo₃P), 9Cl

CAS Registry Number: 12058-28-5

Molecular Formula: Mo₃P

Molecular Weight: 318.794

Accurate Mass: 324.68998

Percentage Composition: Mo 90.28%; P 9.72%

Source/Synthesis: Prepd. by heating the elements together

Physical Description: Black powder

Other Data: Isostructural with α -V₃S

>>Variant: Molybdenum phosphide (MoP), 9Cl

CAS Registry Number: 12163-69-8

Molecular Formula: MoP

Molecular Weight: 126.914

Accurate Mass: 128.879168

Percentage Composition: Mo 75.59%; P 24.41%

Source/Synthesis: Prepd. by heating the elements together

Physical Description: Black powder

Melting Point: Mp 1100 dec.°

>>Variant: Molybdenum phosphide (MoP₂), 9Cl

CAS Registry Number: 61219-54-3

Molecular Formula: MoP₂

Molecular Weight: 157.887

Accurate Mass: 159.85293

Percentage Composition: Mo 60.76%; P 39.24%

Source/Synthesis: Prepd. by heating the elements together

Physical Description: Black powder

References:

Faller, F.E. *et al.*, *Z. Anorg. Allg. Chem.*, 1941, **248**, 209, (*synth, Mo₃P*)

Schönberg, N., *Acta Chem. Scand.*, 1954, **8**, 226, (*cryst struct, MoP*)

Ripley, R.L., *J. Less-Common Met.*, 1962, **4**, 496, (*synth, props, MoP*)

Rundqvist, S. *et al.*, *Acta Chem. Scand.*, 1963, **17**, 37; 1965, **19**, 760, (*synth, cryst struct, Mo₃P*)

Ruhl, R. *et al.*, *Monatsh. Chem.*, 1983, **114**, 817, (*synth, cryst struct, MoP₂*)