



>>Entry Name: Chromium phosphides

Molecular Formula: [CrP]

>>Variant: Chromium phosphide (Cr₃P), 9Cl

CAS Registry Number: 12190-93-1

Molecular Formula: Cr₃P

Molecular Weight: 186.962

Accurate Mass: 186.795289

Percentage Composition: Cr 83.43%; P 16.57%

General Statement: Isomorphous with Fe₃P

Source/Synthesis: Phase in the system Cr-P

Physical Description: Light green powder. Paramagnetic

>>Variant: Chromium phosphide (Cr₂P), 9Cl

CAS Registry Number: 12268-15-4

Molecular Formula: Cr₂P

Molecular Weight: 134.966

Accurate Mass: 134.85478

Percentage Composition: Cr 77.05%; P 22.95%

Source/Synthesis: Phase in the Cr-P system

>>Variant: Chromium phosphide (CrP), 9Cl

CAS Registry Number: 26342-61-0

Molecular Formula: CrP

Molecular Weight: 82.97

Accurate Mass: 82.914271

Percentage Composition: Cr 62.67%; P 37.33%

General Statement: Has an MnP-like struct.

Source/Synthesis: Prepd. by heating Cr and red P to 1000°

Physical Description: Solid with a metallic appearance. Good elec. conductor

>>Variant: Chromium phosphide (CrP₂), 9Cl

CAS Registry Number: 41273-32-9

Molecular Formula: CrP₂

Molecular Weight: 113.944

Accurate Mass: 113.888033

Percentage Composition: Cr 45.63%; P 54.37%

Source/Synthesis: A high-pressure phase in the Cr-P system. Prepd. from the elements at 6.5 x 10⁴ atm. and 1200°

Physical Description: Black, brittle cryst. Shows good metallic conductivity

References:

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