



>>Entry Name: Praseodymium(IV) oxide (PrO₂)

CAS Registry Number: 12036-05-4

PrO₂

Molecular Formula: O₂Pr

Molecular Weight: 172.906

Accurate Mass: 172.897377

Percentage Composition: O 18.51%; Pr 81.49%

Physical Description: Black (dark brown) solid

>>Variant: Praseodymium oxide (Pr₇O₁₂)

CAS Registry Number: 12165-40-1

Molecular Formula: O₁₂Pr₇

Molecular Weight: 1178.347

Accurate Mass: 1178.291809

Percentage Composition: O 16.29%; Pr 83.71%

Physical Description: Black solid

>>Variant: Praseodymium oxide (Pr₉O₁₆)

CAS Registry Number: 12165-51-4

Physical Description: Black solid

>>Variant: Praseodymium oxide (Pr₁₀O₁₈)

Physical Description: Black solid

>>Variant: Praseodymium oxide (Pr₁₁O₂₀)

CAS Registry Number: 12165-54-7

Physical Description: Black solid

>>Variant: Praseodymium oxide (Pr₁₂O₂₂)

Synonym(s): Praseodymium oxide (Pr₆O₁₁)

CAS Registry Number: 12037-29-5

Molecular Formula: O₂₂Pr₁₂

Molecular Weight: 2042.879

Accurate Mass: 2042.778694

Percentage Composition: O 17.23%; Pr 82.77%

Physical Description: Black solid

Other Data: Monoclinic struct. Dissolves in acid to aq. Pr³⁽⁺⁾ with some oxidation of acid

Aldrich: 20517-6

Fluka: 81500

Sigma: P5879

References:

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Andreeva, A.F., *Izv. Akad. Nauk SSSR, Neorg. Mater.*, 1986, **22**, 1320, (*uv-vis*)
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