

PRASEODYMIUM OXIDE NANOPOWDER



Purity
99.9%

Pr_6O_{11}



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NS6130-10-1098

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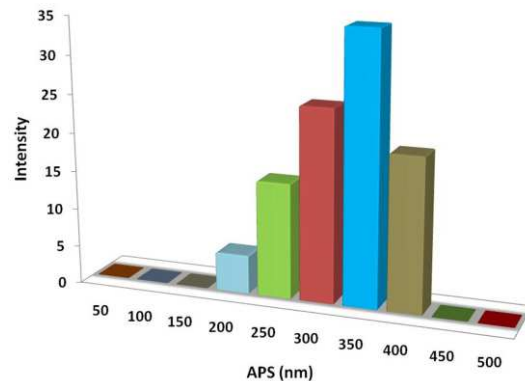
PRASEODYMIUM OXIDE NANOPOWDER

Praseodymium oxide is inorganic compound and its formula is Pr_6O_{11} . It is most stable compound at ambient temperature, pressure and it has a cubic ferrite structure. It is synthesized by distinct method such as thermolysis, molten salt method, calcination or precipitation. Moreover for the preparation of praseodymium nitrate $\text{Pr}(\text{NO}_3)_3 \cdot 6\text{H}_2\text{O}$. The praseodymium precursor is used as a starting material.

Pr_6O_{11} has wider applications for instance in set-up devices for example sensors and act as catalyst in the dispersed porous ceramic. It has also applications in sensors, used as catalyst, higher-temperature pigment and oxygen storage components. Nanosized materials are always attractive due to their size, shape and morphology. It is also utilized with other additives silicon or zircon to manufacture the pigments for use in glass and ceramics.

QuickFACTS

Product	:	Praseodymium Oxide Nanopowder
Stock No	:	NS6130-10-1096
CAS	:	12037-29-5
Color	:	Brown/Black
Form	:	Powder
Symbol	:	Pr_6O_{11}
SSA	:	30-50 m^2/g



ADDITIONAL POWDER CHARACTERISTICS

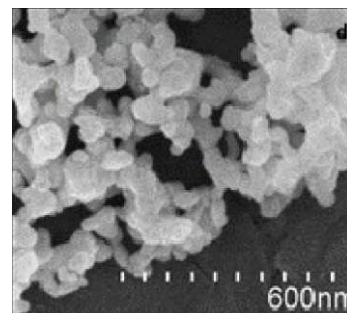
Stock No.	Purity	APS
NS6130-10-1096	99.9%	<300nm

TECHNICAL SPECIFICATION

Molecular Formula	Molecular Weight	Density	Melting Point
Pr_6O_{11}	1021.44 g/mol	6.5 g/cm^3	2183 $^{\circ}\text{C}$

CHEMICAL COMPOSITION

Product	Weight Percent (nominal)	
	Pr_6O_{11}	Other Metal
Praseodymium Oxide Nanopowder	99.9%	1000ppm



APPLICATIONS

- > As a magnetic material
- > As a catalyst
- > Dried powder mixed with the binder is useful in plasma spray guns and coating
- > Oxygen storage components
- > Sensors



20ZICE4589C



19ZAZGO1274G



20ZICE4588M

ISO 9001:2015
CERTIFIED COMPANY

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