

#### NS6130-12-000291

# Quick Facts

# LEAD ZIRCONATE

### Titanate Nanoparticles

Product : Lead Zirconate Titanate Nanopowder

Stock No : NS6130-12-000291

CAS : 12626-81-2 Molecular Formula : O<sub>s</sub>PbTiZr

Form : Crystalline Powder

Purity 99.9%

#### **Technical** Specification

Molecular Weight	Density	Melting Point	APS
303.65g/mol	7.7g/cm³	N/A	100-150nm

PZT materials, and piezoelectric materials more generally, exhibit a unique range of properties. In a basic sense, if a piezoelectric material is deformed, an electric charge is generated in what is known as the piezoelectric effect. Lead zirconate titanate is an inorganic compound with the chemical formula Pb[ZrxTi1-x]O3 ( $0\le x\le 1$ ). Also called lead zirconium titanate, it is a ceramic perovskite material that shows a marked piezoelectric effect, meaning that the compound changes shape when an electric field is applied. It is used in a number of practical applications such as ultrasonic transducers and piezoelectric resonators. Lead zirconate titanate-based materials are components of ceramic capacitors and STM/AFM actuators (tubes).



APS 100-150nm









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nate Titanate Na

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