



**Synthetic Diamonds – Natural Diamonds – CBN Cubic Boron Nitride –  
Synthetic Diamond Powder for Polishing – Technical Consulting**

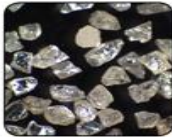
# NATURAL Series



## LSNP Series

**LANDS Superabrasives** supplies a natural virgin diamond powder which is engineered for metal-bond applications as well as for electroplated products.

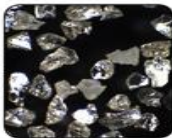
LSNPG



LSNPG consists of very blocky, well shaped natural diamond particles, with irregular surfaces for strong bond retention. The strong edges of this selected product guarantee optimal cutting action of the tool. LANDS takes pride in supplying a consistent quality material. This product is also available in processed versions: lightly processed (-lp), processed (-p), and fully processed (-fp)

Available Sizes: Mesh 12-80

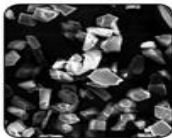
LSNPW



LSNPW is a virgin material that features characteristics similar to LSNPG, but marketed in sizes smaller than 80 mesh. This superior material consists of strong particles having compact shape and sharp edges. Having excellent bond retention, LSNPW is known to the tool maker as a true multi-purpose performing natural diamond powder.

Available Sizes: Mesh 80-500

LSNPM



LSNPM is a natural diamond micron powder manufactured to high standard with regard to both shape and size distribution. Our quality control guarantees a product that has superior wear characteristics when compared to conventional abrasives. This micron powder is produced to the same strict tolerances as LANDS synthetic diamond micron powders.

Available Sizes: 0-1/4 to 54-80

The high level of thermal stability makes the powders ideally suited for tools requiring high temperature metal-bond systems. When properly heated and under perfect conditions to max 1100°C, diamond will not break down in the manufacturing process.

The natural mesh and micron powders of LANDS Superabrasives are carefully produced to yield a consistent high quality product. Particle shape and size distribution are carefully monitored.



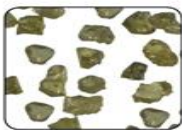


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# NATURAL *synthetic substitutes*



## TI Comparison of LSNP Series vs LS2280



### Similarities between natural (LSNP series) and LS2280

**Crystal Structure-** Like natural diamond the LS2280 is a milled product which gives both products an almost identical crystal structure.

**Crystal Surface-** A surface treatment gives the faces of the diamond a rough 'crater-like' surface which like natural diamond helps it grip into an electroplating bond and hold throughout the use of the tool or wheel.

**Toughness Index-** The LS2280 has a TI (toughness index) almost identical to the TI of natural diamond, as shown on the chart below:

