

# TiO<sub>2</sub> Electrode Paste

HG-NPT17 made by H.Glass SA in Switzerland is a **Titanium Dioxide Paste** to prepare working electrodes for DSC and Perovskite solar cells.

## Properties:

Surface area	86.2 m <sup>2</sup> g <sup>-1</sup>	Particle size:	17 nm
Average diameter of pores	16.1 nm	Concentration wt %:	17.17 %
Middle diameter of pores	14.1 nm	Vehicle	Organic binder

<p><i>SEM image of TiO<sub>2</sub> surface after annealing</i></p>	<p><i>Transparency of TiO<sub>2</sub> layers with different thicknesses on FTO</i></p>

**Application methods:** screen-printing; doctor blading; spin-coating possible after dilution in alcohol (Ethanol, 2-propanol or Butanol).

## Screen printing parameters:

Mesh	TiO <sub>2</sub> Thickness
90	2.0 μm
61	3.7 μm
32	6.8 μm

**Annealing temperature:** 450 to 500° C

**Transparency of layer:** After annealing, the layer of the TiO<sub>2</sub> will be highly transparent.

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