

## Technical Data Sheet

### THICK FILM MATERIALS

**Product Type:** Conductors

**Product Name:** C3605P / C3605S



#### Platinum Conductor Paste

##### Description

C3605P and C3605S are pastes only consisting of Pt powder and organic vehicle. They are intended to be mixed with customer specific adhesion promoters or to be co-fired with tape.

C3605P and C3605S can – depending on the exact viscosity which is delivered – be either sprayed / brushed (“P”-version) or screen printed (“S”-version).

They are particularly useful for the manufacture of O<sub>2</sub> sensors.

##### Key Benefits

- Fritless pastes
- Chemically resistant
- Can be used on alumina, zirconia or other bodies
- Free of lead, cadmium and nickel

##### Processing

- 1) Spatulate well prior to processing.

When stored in a refrigerator, the paste should have acquired room temperature before being opened, to avoid condensation.

- 2) Print through a 200 – 325 mesh stainless steel screen.
- 3) Level at room temperature for 10 minutes.
- 4) Dry at 125 – 150 °C for 10 – 20 minutes.
- 5) Fire at 1100 – 1500 °C (peak) for 5 – 30 minutes, and with a total firing cycle time of c. 30 – 60 minutes.

##### Thinner

HVS 100

##### Typical Properties (Paste)<sup>1</sup>

###### Form

“P” - version	Sprayable / brushable
“S” - version	Screen printable

###### Viscosity

“P” - version	Not measured (very low)
“S” - version	30 – 45 Pas (25 °C, D = 50 /s)

###### Printing Speed

“S” – version	Up to at least 10 cm/s
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###### Shelf Life

“P” - version	3 months
“S” - version	6 months

from date of shipment with correct storage (in a dry, cool (2 – 23 °C) and dark place with container

##### Compatibility

Substrates	Quartz, Al <sub>2</sub> O <sub>3</sub> , ZrO <sub>2</sub> Mica, Porcelain
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Legend:

<sup>1)</sup> Typical properties based on laboratory test methods. For optimum results all materials should be fired in a profiled furnace supplied with dried, hydrocarbon and other contaminant free air (PP-1).

\* See the data sheet issue date (DD/MM/YY) as reference of validity of latest edition which is available on request

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