

Technical Data Sheet

THICK FILM MATERIALS

Product Type: Powders

Product Name: Au 200-30

Gold Nano Suspension

Description

Au 200-30 is a very stable aqueous suspension of high purity of gold particles. The Au content is up to 25 wt. % possible. Au 200-30 is dilutable with deionised water.

Depending on the kind of surface which is to be coated, a highly reflective bright golden or red color can be achieved.

The material can be applied by brushing, spraying, dipping, coating or with inkjet on various substrate materials.

Typical Processing Steps

1. Applying on a surface (e.g. glass and ceramic substrates or glass and ceramic powders) by dipping, spraying or brushing.
2. Drying up to 150 °C.
3. Additional thermal treatment > 450 °C is recommended to remove possible foreign particles like organic and other impurities. This treatment is proposed to increase mechanical stability such as the adhesion of applied layers on various substrates.

The treatment temperature will vary depending on the kind of applications.

Typical Properties (Suspension) ^{1,2}

Particle Size Distribution ³	1.0 – 6.0	[nm]
Suspension Color	Dark red	
Consistence	Aqueous	
Precious Metal Content	Up to 25 wt. %	
Metal Purity	> 99.9 wt. %	

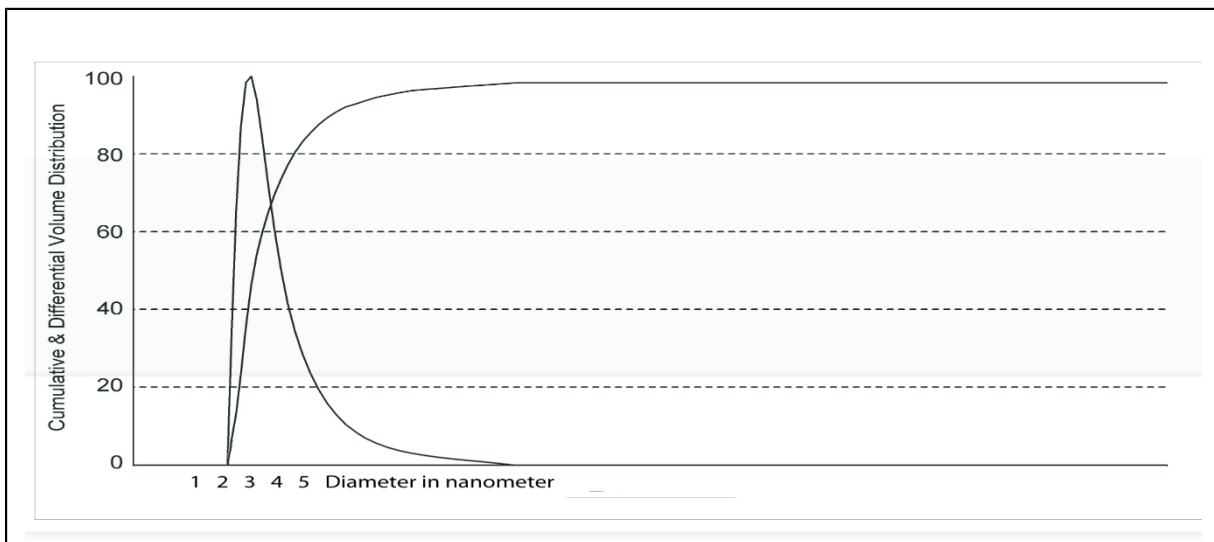


Au 200-30
0.1 wt. %
Suspension



Au 200-30
8.0 wt. %
Suspension

Typical Particle Size Distribution¹



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Legend:

1) REACH compliant according to the latest ** Annex XIV to Regulation (EC) of the European Parliament and of the council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.

2) RoHS compliant according to the latest ** Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)

3) Measured with XDC (x-ray centrifuge)

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

Heraeus Electronics
Heraeus Deutschland GmbH & Co. KG
Heraeusstraße 12 – 14
63450 Hanau, Germany
www.heraeus-electronics.com

Americas
Phone +1 610 825 6050
electronics.americas@heraeus.com

China
Phone +86 21 3357 5457
electronics.china@heraeus.com

Asia Pacific
Phone +65 6571 7677
electronics.apac@heraeus.com

Europe, Middle East and Africa
Phone +49 6181 35 3069, +49 6181 35 3627
electronics.emea@heraeus.com