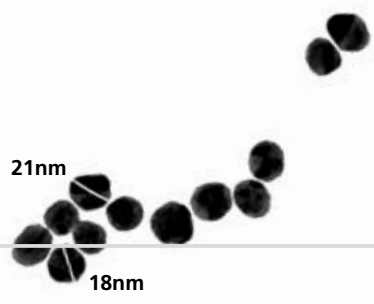


DIAGNOSTIC PRODUCTS

GOLD COLLOIDS AND CONJUGATES



METALOR[®]

NANOTECHNOLOGY FOR A TOUCH OF EXCELLENCE



METALOR TECHNOLOGIES

The Metalor Technologies Group, based in Neuchâtel in Switzerland with subsidiaries in 15 countries worldwide, is active in the field of precious metals and advanced materials.

The company is one of the world leaders in precious metal refining and can achieve purity levels of higher than 99.999%.

Precious metals used at Metalor

- Gold (Au)
- Platinum (Pt)
- Palladium (Pd)
- Silver (Ag)
- Rhodium (Rh)
- Ruthenium (Ru)
- Iridium (Ir)

TECHNOLOGY PRODUCTS

The Technology Products Department is dedicated to new businesses and market introduction of innovations based on the Metalor core competences in metallurgy and inorganic chemistry of precious metals. It is geared to fast and flexible execution of market goals whilst ensuring long term growth of the new activities.

The refining plant in Marin produces the starting material necessary for the synthesis of precious metal nanoparticles. Special production equipment and carefully trained personnel produce this well-characterized material at high purity levels according to strict procedures and quality standards.



NANOTECHNOLOGY

The highly-qualified nanotechnology team is committed to the development and manufacture of precious metal nanoparticles for various applications for both industrial use and R&D projects.

New products are constantly being developed for nanotechnology applications. To respond to the diverse market demands the Metalor laboratories are equipped for the synthesis of precious metal nanoparticles from lab scale to large production batches.

Purification processes such as ultra-filtration and ultra-centrifugation are implemented. Chemical analyses such as elemental analysis, UV/Vis, and electron microscopy such as SEM and TEM are carried out.

LEADING EDGE TECHNOLOGY BY PRECIOUS METAL EXPERTS



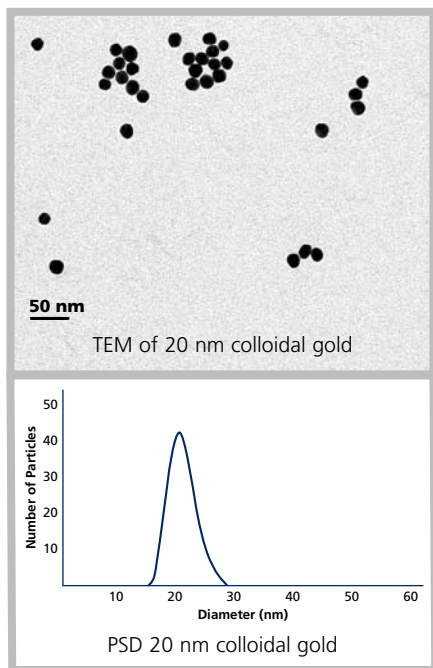
GOLD COLLOIDS

Metalor manufactures colloidal gold from high purity gold salts which exhibit superior labelling properties in rapid test diagnostic applications.

These are the properties which distinguish Metalor gold colloids.

- High purity
- High sensitivity
- High stability

Each batch is systematically controlled: absorbance, size, particle size distribution (PSD) and uniform spherical shape are analysed.



SIZES AVAILABLE

10 nm, 20 nm, 30 nm, 40 nm

SIZE DISTRIBUTION

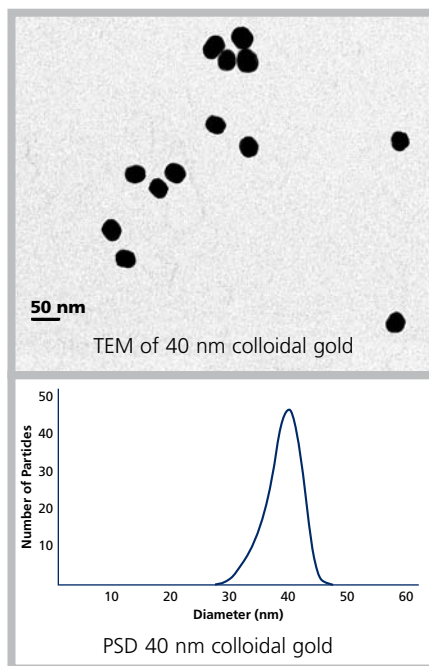
80% of the particles within ± 5 nm

OPTICAL DENSITY

Peak at 520 - 530 nm (10 - 40 nm)

SOLVENT

Highly purified water (HPW)



CONJUGATES

Customized protein conjugation is available upon request. Combined with Metalor gold colloids, the custom conjugation services allow the development of high quality conjugates, using reagents supplied by the customer or sourced by Metalor.

PRECIOUS METAL COLLOIDS

Metalor has developed other precious metal colloids such as silver aimed at the diagnostic industry.

Further precious metal colloids of varying shapes and composition can be requested. Customers can also benefit from up-scaling studies as well as projects with full technical support.



TECHNOLOGY PRODUCTS DEPARTMENT

SWITZERLAND

Metalor Technologies SA

Avenue du Vignoble

CH-2009 Neuchâtel

Phone +41 32 720 6207

Fax +41 32 720 6609

technology_products.ch@metalor.com

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Metalor Technologies SA

Avenue du Vignoble, CH-2009 Neuchâtel

Tel. +41 (0) 32 720 62 71, Fax +41 (0) 32 720 66 09

technology_products.ch@metalor.com, www.metalor.com

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