Various inks and pastes are needed for functionalization of parts and components. These include both commercially available materials and internally developed inks and pastes that we formulate to meet your requirements. We utilize our extensive technical and analytical resources for this purpose. After the printing process, the applied structures are thermally activated in order to increase their electrical conductivity and mechanical strength by removing any organic parts, thus producing functionally integrated components.

Printable inks and pastes

- Metals: Ag, Au, Cu, alloys (CuNiMn, NiCr)
- Insulators: ceramics (TiO₂, SiO₂, Al₂O₃), polymers
- Dielectric materials
- Biological materials: enzymes, proteins, DNA, cells, bioceramics
- Thermocouples (types T, K, and J) and resistor pastes (heating structures)
- Graphene and graphene composites

Characterization

- Viscosity and sedimentation stability
- Surface tension and interface energy
- Particle size and distribution
- Material and phase analysis (EDX, XRD, SEM, TEM)

Printing methods

- Screen printing
- Pad printing
- Dispensing valve technologies
- InkJet printing
- Aerosol Jet® printing