



**Kisling**

Kisling offers a wide range of adhesive technologies for magnet bonding, securing & sealing of housings as well as encapsulants for E-Motors, power electronics, high-voltage batteries and charging stations

Our products are characterized by various temperature resistances, viscosities, curing times, thermal conductivity as well as flexibilities.

# Excellence in Adhesive, Sealant and Encapsulant Manufacturing

## YOUR BENEFITS

- + Process consulting and on-site support
- + Customised product development
- + Label free products
- + CMR free products
- + Odorless acrylates
- + Direct supply

## OUR MARKETS

- + Lightweight / Composites
- + E-Mobility / Electric Motors
- + Electronics
- + Fluid Technology
- + Bus, Truck & Rail (BTR)/ Automotive
- + Loudspeaker
- + Maintenance, Repair & Overhaul (MRO)

## OUR PRODUCT RANGE

- + Adhesives and sealants:
  - (Meth)Acrylic structural adhesives
  - Epoxy structural adhesives
  - Anaerobic adhesives
  - Cyanacrylate instant adhesives
  - Silicones
- + Encapsulants:
  - Polyurethane
  - Epoxy

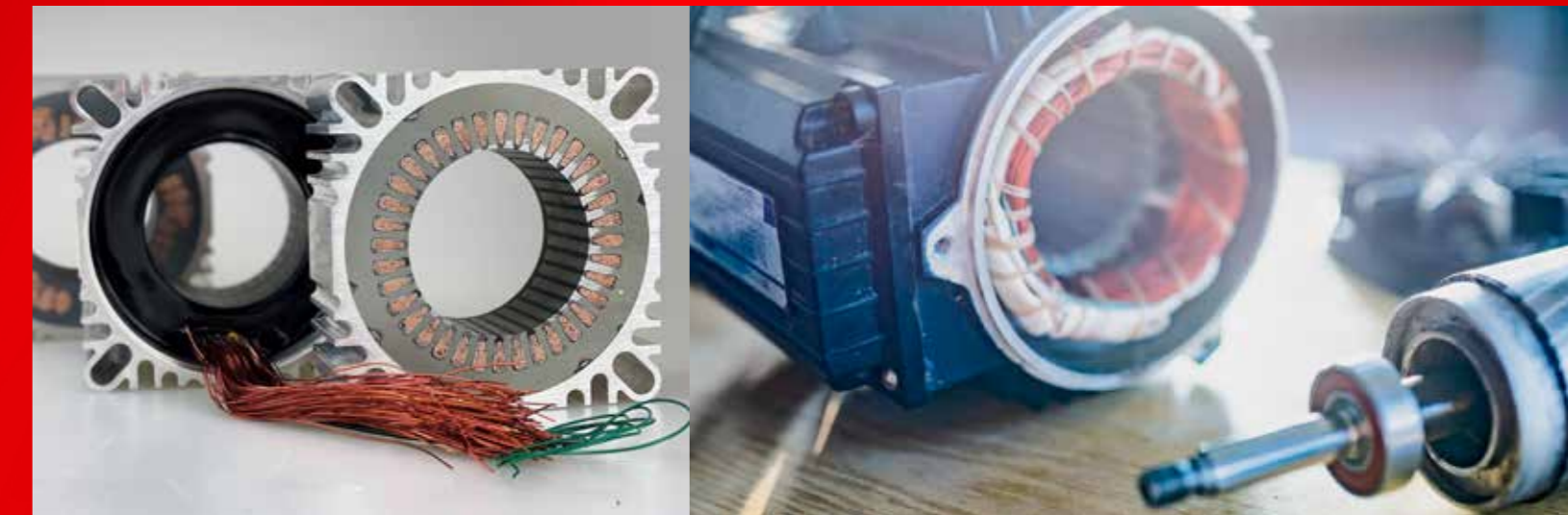
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# Adhesives and Encapsulants for E-Mobility



**BONDING +  
SEALING +  
ENCAPSULATION**

**Kisling**

MEMBER OF THE WURTH GROUP

# Application Areas, Key Products & Success Stories

## Application Areas & Key Products

### Adhesives



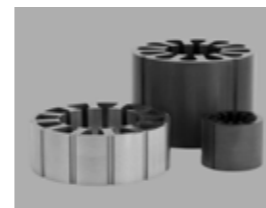
Bonding of permanent magnets



Securing of bolts and nuts motor housing assembling



Bonding of sheet metal packages, commutators and bearings



Bonding of electrical steel laminations

#### ANAEROBIC

**4451**  
fast curing, high strength, NSF certified

**4453**  
fast curing, temp. resistant, high strength, DVGW & NSF certific.

**4920**  
Activator(solvent free)

#### EPOXY

**7440**  
black, pasty, high temperature resistance

#### ACRYLATE

**1039/1090**  
no-mix, medium viscosity, very fast curing, impact resistant

**1320**  
fast curing, high strength, low odour

**1810**  
non-sag, high impact resistance, low odour, good bonding to metal, ferrite, glass, ceramic

#### DUAL CURING

**2453**  
dual-cure, low viscosity, temperature resistant, high strength

### Encapsulants



Electrical Motor



Power Electronics



High-Voltage Batteries



Charging Stations

#### POLYURETHANE CMR-FREE VERSIONS AVAILABLE

**8503 + 8901**  
Thermal conductivity of 1.5 W/mK, low-viscosity, UL94-V0, medium hardness

**8513 + 8973**  
Thermal conductivity of 2.6 W/mK, self-levelling, UL94-V0

**8519 + 8973**  
Thermal conductivity of 3.5 W/mK, self-levelling, UL94-V0

#### EPOXY

**7500 + 7920**  
Thermal conductivity of 1.2 W/mK, self-levelling, good chemical resistance, cold curing

#### GAPFILLER

**8791 + 8991**  
1:1 mixing ratio, good flowability, 1.0 W/mK

**8792 + 8992**  
1:1 mixing ratio, Bridges gaps, 2.0 W/mK

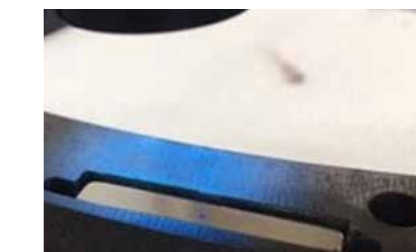
**8793 + 8993**  
1:1 mixing ratio, easy to apply, 3.0W/mK

#### 1K PASTE CMR-FREE

**8702**  
Thixotropic, non-drying, 2.0 W/mK, silicone-free

**8704**  
High temperature resistance, silicone-free, 3.5 W/mK

## Success Stories & Customer Benefits



Projekt: Bonding of pocket magnet

Produkt: 2453

Nutzen: Fixture time saving of 66 % due to very fast UV curing



Projekt: Magnet bonding retarder

Produkt: 1039/1090

Nutzen: First handling strength already after 30 seconds



Projekt: Permanent magnet in motor housing

Produkt: 7440

Nutzen: Gap filling of 5 mm due to large magnets



Projekt: Stator Encapsulation (Industrial Motor)

Produkt: 7500 + 7920

Nutzen: Increase of e-motor efficiency due to lower peak temperatures



Projekt: Encapsulation of Rotor Positioning Sensor

Produkt: 8500 + 8973

Nutzen: Very good flow properties and low density despite high thermal conductivity



Projekt: Battery casting of Accumulaor Machine

Produkt: 8605 + 8973

Nutzen: Improved thermal management during operation and charging phase

#### KISLING

+ Manufacturer of adhesives, sealants & encapsulants

+ >70 employees worldwide

+ >40 distributors in more than 25 countries

+ Revenue 2021: >20 Mio. CHF

+ >200 products, Swiss made