sol epoxy

PRODUCT SELECTOR GUIDE

COATING POWDERS

PRODUCT APPLICATIONS DATA

SOLEPOXY SERVES THE WORLD

Corporate

Olean, NY, USA
Research & Development
Manufacturing
Customer Service

Amsterdam, NL
Marketing
Planning
Technical Sales

Warehouses

Olean, NY, USA
Rotterdam, NL
Calexico, CA, USA
Chennai, India
Manila, Philippines

Safety stock in cold-storage warehouses around the globe minimize shipping costs and delivery time.

Market Partners

Indian subcontinent
Greater China
Korea
Southeast Asia

Representatives fluent in local languages provide product information & technical support

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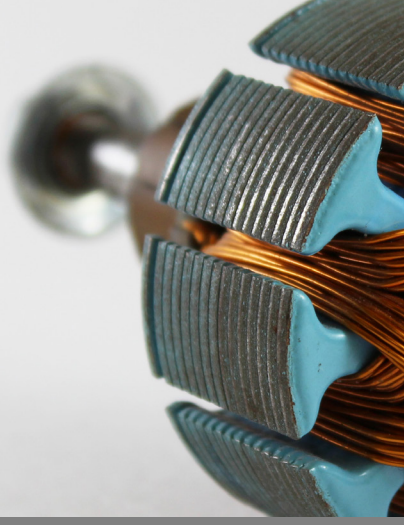


Motor Iron Slot Insulation

The new standard for performance & productivity

BEST PERFORMANCE, PRICE & PRODUCTIVITY

- The fastest Class H product in the market today
- Class H at the Class F price

Color matched and specially formulated to run in the same production lines with our most economical automotive fluid-resistant Class F epoxy coating powder.

CLASS H
SolEpoxy DK7-20H

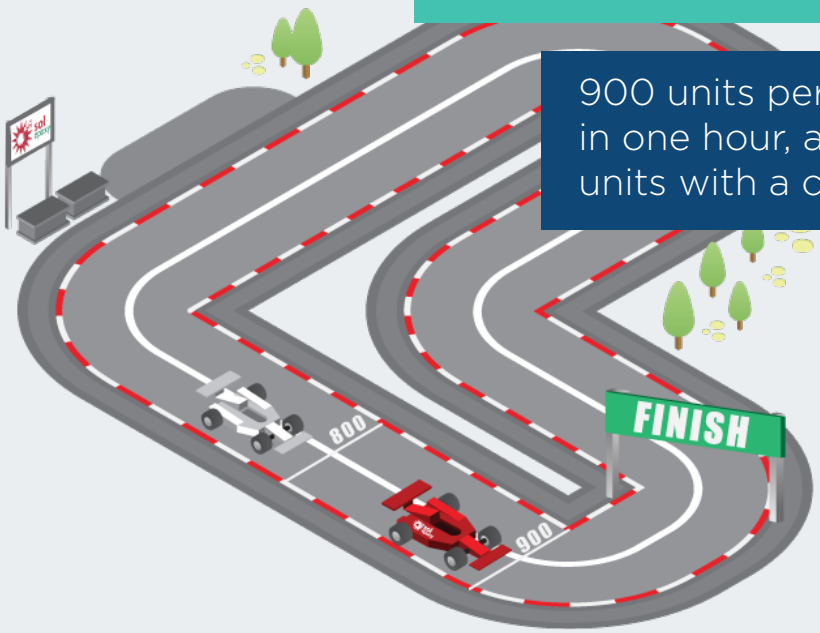
With a Thermal index of 186°C, DK7-20H is a strong Class H powder.

	DK7-20H	DK7-0953M	DK15EG-05	DK15-02
UL 1446 system Class rating	H	F	F	B
Cut through resistance (°C)	396	360	380	300
Edge coverage, %	41	45.8	34.2	45
Hot plate gel time @ 160 °C @ 210 °C	 26 10	 57 27	 18 5	 29 14
Colors	● ●	● ●	● ●	● ● ●
Application Method	Fluidized Bed	Fluidized Bed	Fluidized Bed	Fluidized Bed Electrostatic Spray
Storage life @ 10 °C , months	18	18	9	12
Floor life @ 23°C, months	9	12	6	3

DK7-20H
DK7-0953M
DK15EG-05
DK15-02

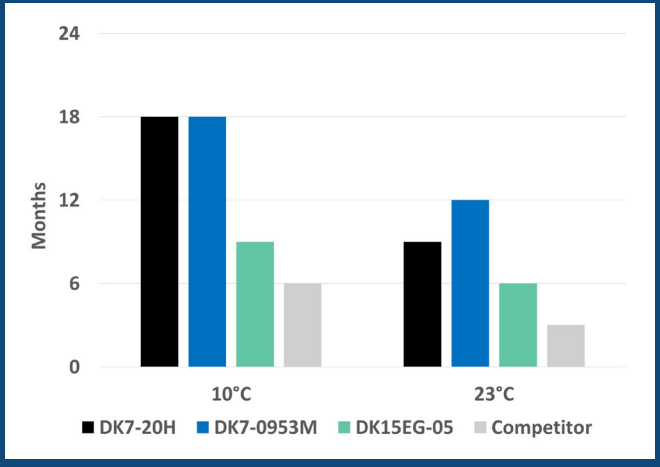
Units per hour

DK7-20H runs up to 12% faster on a Braun electrostatic fluidized bed



900 units per hour coated with DK7-20H in one hour, as compared to only 800 units with a competitive material!

Excellent Stability



- A longer floor life at higher temperatures saves storage & transport costs
- DK7-0953M has been successfully used in hot & humid environments for years
- Now DK7-20H features the best floor life among any class H capable product

Power Applications

Best and broadest product line for Low and Medium Voltage

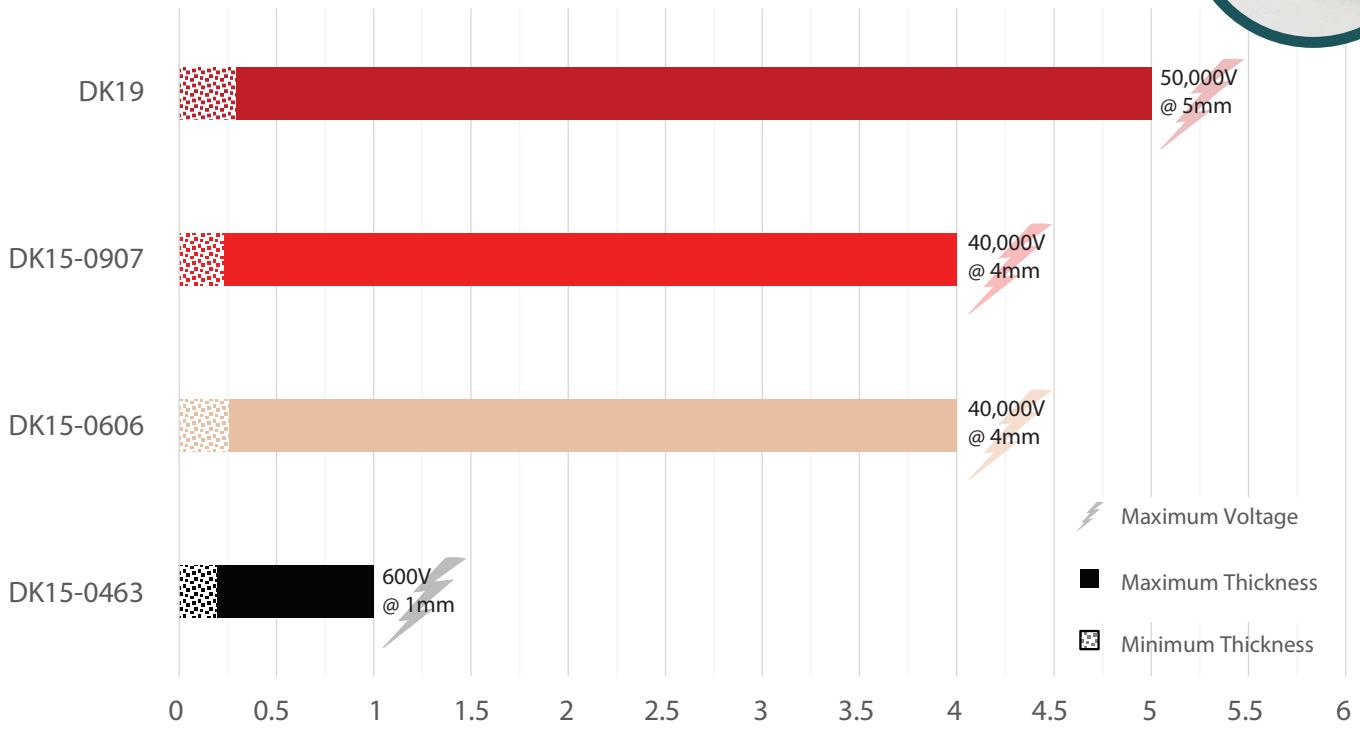
Insulation up to 50 kV

SolEpoxy provides the only coating powders that build up to 5 mm thick

Fusion bonded epoxy is the **preferred insulation for busbars** because it yields no air gap and no seems.

- Moisture protection
- Thermal conductivity
- Impact and scratch resistant
- Able to insulate bends and shapes
- High productivity and quality

Achievable Coating Thickness



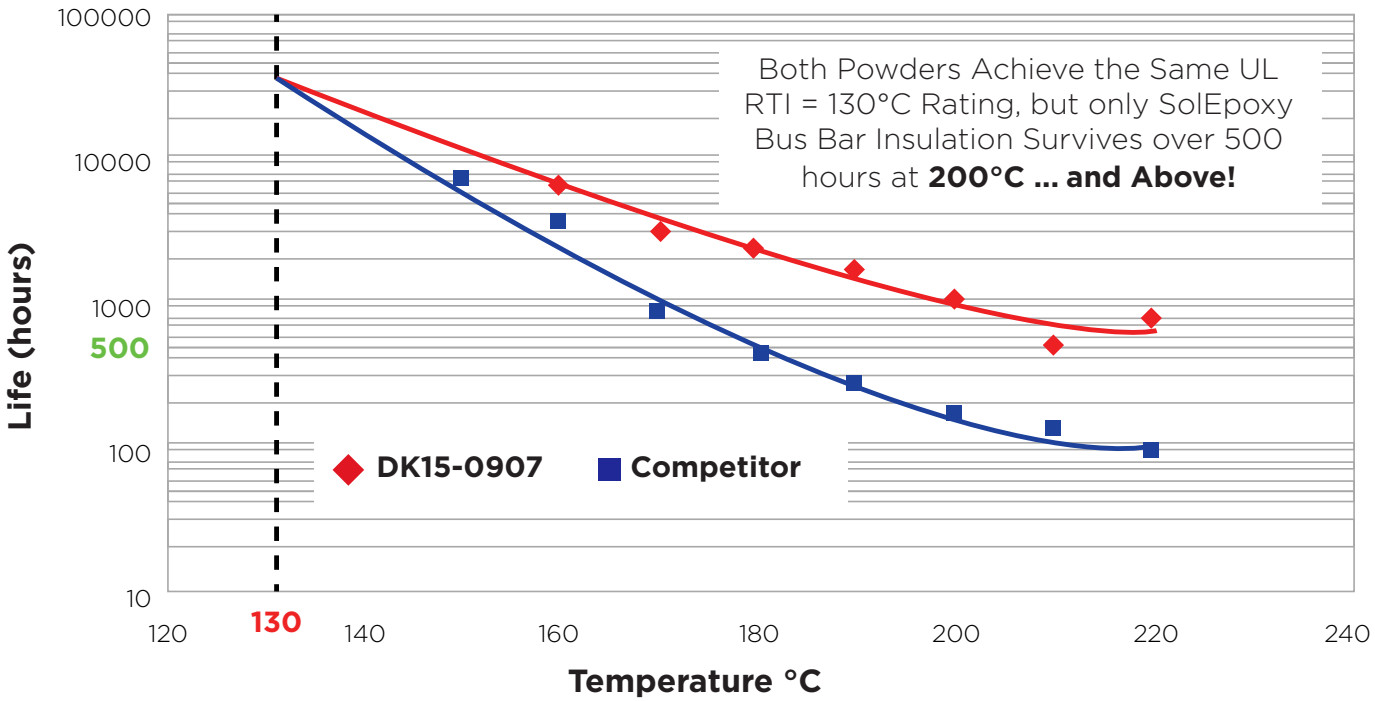
DK15-0907
DK15-0606
DK19 Red
DK15-0463

Switchgear, Network Connectors and Busbars

	DK15-0463	DK15-0606	DK15-0907	DK19 Red
Glass Plate Flow (mm)	27	20	19	21
Dielectric Strength (kV/mm)	44	46	46	41
Hot Plate Gel Time @ 160 °C @ 210 °C	 N/A 55	 24 10	 44 11	 55 12
Preheat Temperature, °C	170-220 °C	170-220 °C	170-220 °C	170-220 °C
Arc Resistance, seconds	130	135	135	168
Colors	●	● ●	● ● ●	●
Application Method	Fluidized Bed Electrostatic Spray	Fluidized Bed	Fluidized Bed Electrostatic Spray	Fluidized Bed
Storage Life @ 10 °C, months	18	18	18	18

Extreme Temperature Durability

SolEpoxy Highly Filled Composite Powders Conquer the Heat



Power Applications

Functional coating at micron thickness

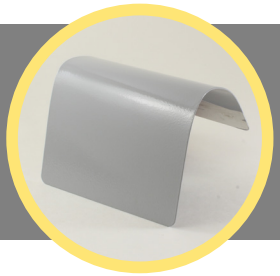
Functional epoxy insulation for applications below 60V

Electric cars

Data centers

SolEpoxy products provide fusion-bonded insulation

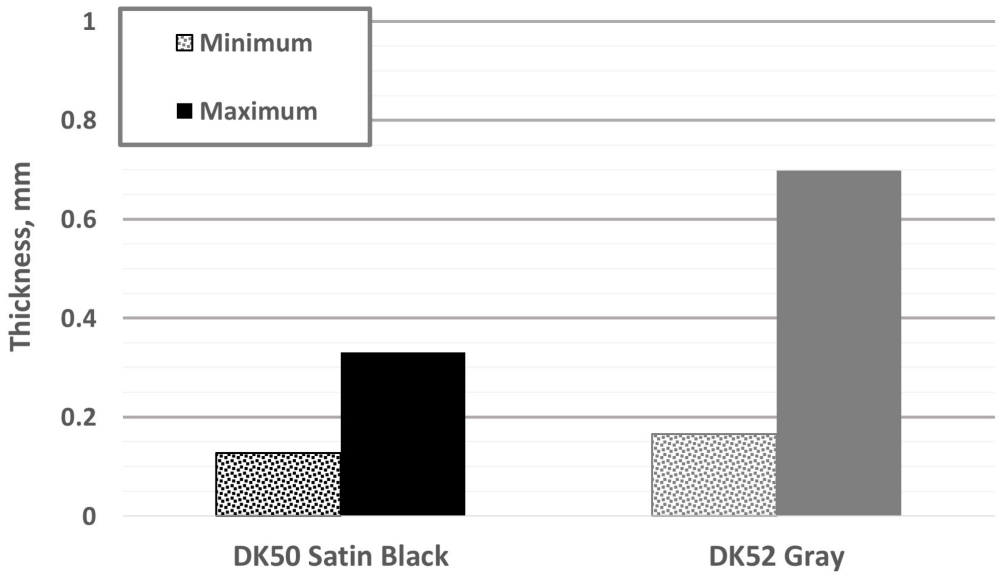
- Seamless & impermeable
- Thin & smooth



DK52 is tough & flexible:

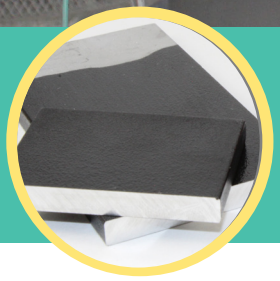
- Does not crack when flexed and bent
- Suitable for very thin conductors
- Even thin coatings have exceptional moisture resistance & dielectric strength

Achievable Coating Thickness



DK50
DK52
DK53

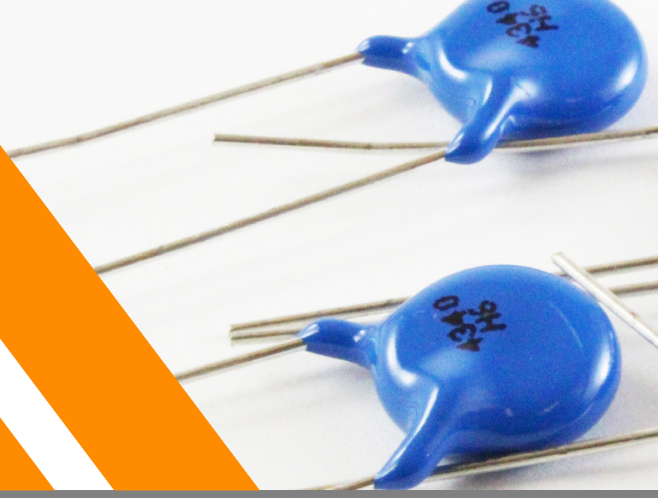
Available in a wide range of colors



DK53 for thin & uniform functional coatings on cold substrate:

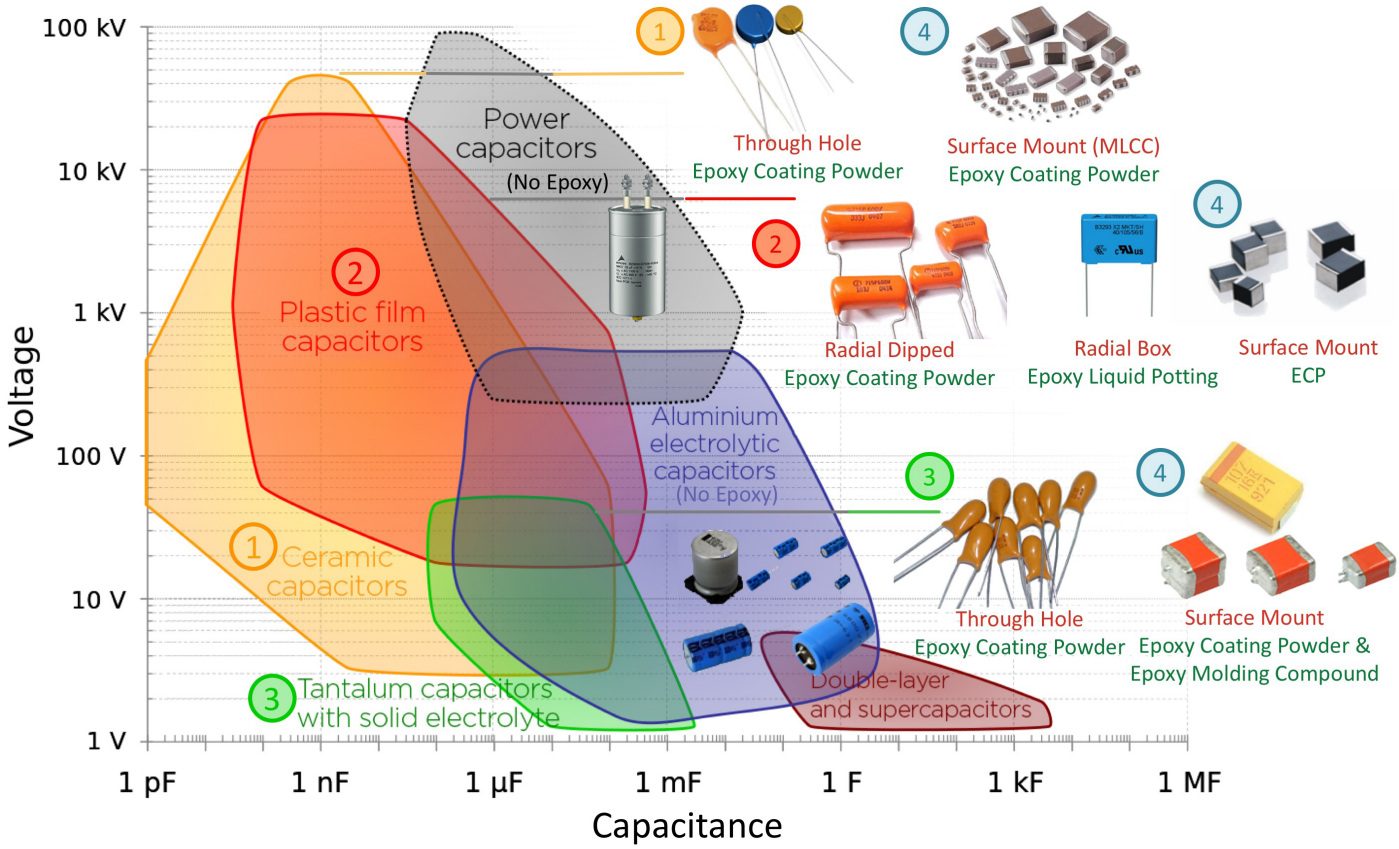
- Apply via electrostatic spray on hot or cold parts
- For design miniaturization with epoxy protection

	DK50	DK52	DK53
Application Method	Spray	Fluidized Bed Spray	Spray
Recommended Preheat Temperature, °C	210	170	25
Recommended Post Cure Temperature, °C Time, minutes	200 2	200 10	180 15
UL 94 V-0		Yes	



Passive Electronics

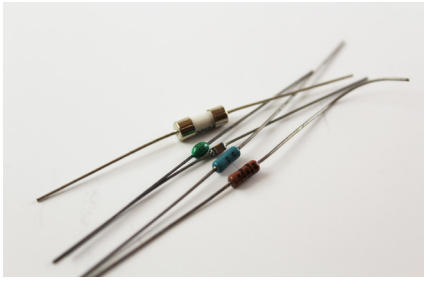
The inventor of epoxy coating for passive devices



Capacitors

Products for ceramic, film wrap, and tantalum capacitors with the best thermal cycle performance.

Resistors



The Hysol legacy is rooted in products for resistors, including resistor networks, thermistors, and varistors.

Inductors

SolEpoxy DK18-05 is still the industry standard for toroids. Products are also available for binding ferrite potcores.

DK18-05
DK18-0955
DK18-2100
DK18-3000
DK30-0952

Innovating capacitor coating powder for 65 years

Film-wrap

Laser-markable epoxy, fusion-bonded to delicate plastic film

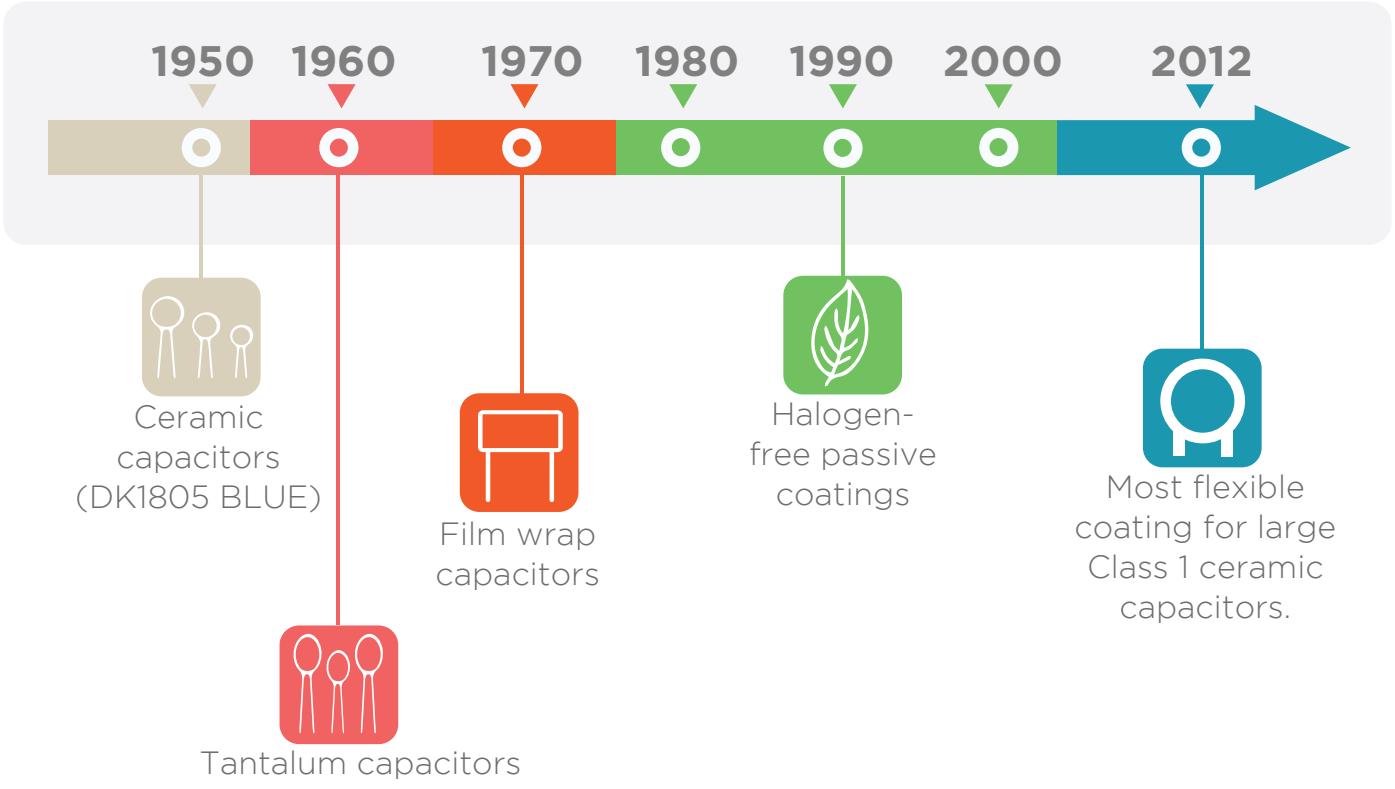
Tantalum

Unique self-healing materials that solve the pinhole problem

Class 1 Ceramics

Over a thousand thermal cycle achievable of large class 1 ceramic capacitors

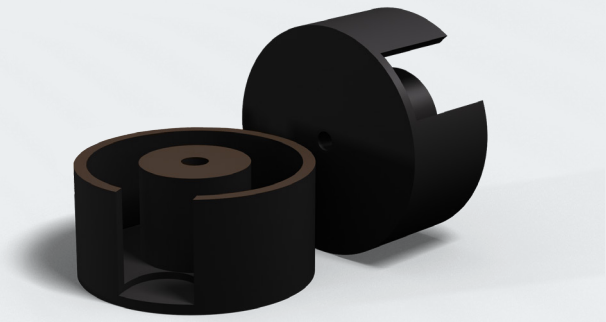
On the shoulders of giants: SolEpoxy upholds the Hysol tradition of excellent materials for passive electronics



Epoxy Binding Resin

For high yield powder metal processing

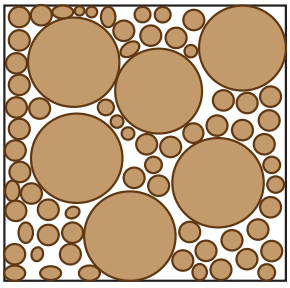
Used in powdered metal components, DK14-2100 was developed as a binding resin to increase green strength.



These shapes are compacted and baked powdered metal cores.

DK14-2100 Brown

- **Excellent Green Strength**
  Epoxy powder holds the powdered metal together after pressing, before curing.
- **Class F Heat Stability**
  No degradation in color or physical properties at elevated temperatures approaching 150°C
- **Low Moisture Absorption**
  Maintains superior physical & magnetic properties when exposed to humidity



Optimal particle size
improves green strength after cold pressing

Short curing times for
maximum productivity

Low shrinkage binding resin reduces core stress to minimize effect on magnetic and inductance properties.

SOLEPOXY TECHNOLOGY CAPABILITY

R&D department

SolEpoxy's R&D group builds on a rich history of brilliant chemists, scientists, and engineers that dates back to **Russ Houghton** – the innovative founder of Hysol in Olean, New York, in 1948.

And now, the same Olean facility attracts talent to invent composite materials that uphold the tradition of research excellence.

SolEpoxy devotes about 10% of revenue to the company's permanent commitment to R&D excellence.
This exceeds the industry norm.

These investments are working. Since its founding, SolEpoxy has developed breakthrough products in every segment that we address.

Today, our customers are the beneficiaries. Working hand-in-hand with customer design teams, SolEpoxy is a reliable and creative partner in problem solving.

SOLEPOXY IS YOUR PARTNER IN PROBLEM SOLVING

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