

TERMISK LEDENDE MATERIALE



POTTING GEL

SILICONE POTTING GEL TCR-D-SI-2C

DISPENSABLE / 2 PARTS

TCR-D-SI-2C is a 2-part addition cure silicone potting compound which is filled with thermally conductive fillers of high temperature stability. After curing the system remains elastic. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed at normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access.



PROPERTIES

- Silicone
- 2 part addition cure
- Thermal conductivity: 0.68 W/mK
- Remains elastic after curing
- Almost zero stress on components
- Dispensable or mouldable
- High resistivity against water and humidity
- Shock absorbing

AVAILABILITY

- 2 kg / 40 kg (2 x 20 kg) AB Kit

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- Heat Pipes
- BGA

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

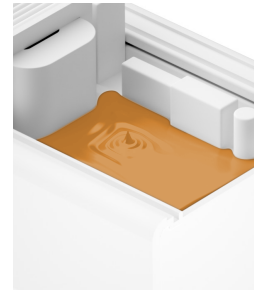
PROPERTY	UNIT	A PART	B PART
MATERIAL		Silicone	Hardener
Colour		Beige	Black
Density @ 23 °C	g/cm ³	1.6	1.6
Mixing Ratio	Weight or Volume	1 : 1	1 : 1
Hardness	Shore A	45	45
Viscosity (Brookfield)	Pas	6	6
Viscosity (Mixed) (Brookfield)	Pas	6	6
Tensile Strength (cured elastomer after 7 minutes @ 150 °C)	psi	252	252
Elongation at Break (cured elastomer after 7 minutes @ 150 °C)	%	240	240
Coefficient of Thermal Expansion (cured elastomer after 7 minutes @ 150 °C)			
Volumetric	1 x 10 ⁻⁶ /K	650	650
Linear	1 x 10 ⁻⁶ /K	217	217
Pot Life @ 23 °C, 65 % rel. H.	min	ca.100	ca. 100
Curing Time @ 25 °C / 100 °C		24 h / 7 min	24 h / 7 min
Shelf Life (from Date of Manufacturing, unopened, @ < 30 °C)	Months	24	24
Flammability	UL 94	V0	V0
RoHS Conformity	2015 / 863 / EU	Yes	Yes
TECHNICAL			
Thermal Conductivity	W/mK	0.68	0.68
Operating Temperature	°C	- 55 to + 260	- 55 to + 260
Dielectric Strength	kV/mm	> 18	> 18
Volume Resistivity	Ohm - cm	4.02 x 10 ¹⁴	4.02 x 10 ¹⁴
Dielectric Constant	@ 1 kHz	3.08	3.08
Dissipation Factor	@ 1 kHz	0.009	0.009

All data without warranty and subject to change. Please contact us for further data and information.

SILICONE POTTING GEL TCR-H-SI-2C

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-H-SI-2C is a 2-part addition cure silicone potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access.



PROPERTIES

- Silicone
- Low viscosity
- 2 part addition cure
- Thermal conductivity: 1.2 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Heat accelerated curing
- High resistivity against water and humidity
- Shock absorbing

AVAILABILITY

- 2 kg / 10 kg (2 x 5 kg) AB Kit

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- Heat Pipes
- BGA

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

PROPERTY	UNIT	A PART	B PART
MATERIAL			
Colour		Silicone Light grey	Silicone Orange
Density @ -23 °C	g/cm ³	2.2	2.2
Mixing Ratio	Weight or Volume	1:1	1:1
Hardness (7 days @ -23 °C and 50 % rel. H.)	Shore A	40	40
Viscosity (Brookfield)	Pas	2	1.9
Viscosity (Mixed) (Brookfield)	Pas	1.95	1.95
Tensile Strength (7 days @ -23 °C and 50 % rel. H.)	psi	117	117
Elongation at Break (7 days @ -23 °C and 50 % rel. H.)	%	30	30
Tear Strength (7 days @ -23 °C and 50 % rel. H.)	kN/m	4.56	4.56
Young Modulus (7 days @ -23 °C and 50 % rel. H.)	psi	722	722
Coefficient of Thermal Expansion (7 days @ -23 °C and 50 % rel. H.)			
Volumetric	1 x 10 ⁻⁶ /K	402	402
Linear	1 x 10 ⁻⁶ /K	134	134
Linear Shrinking (7 days @ -23 °C and 50 % rel. H.)	%	0.03	0.03
Pot Life	min	ca. 50	ca. 50
Curing Time @ 25 °C / 100 °C		4 hrs. / 6 min	4 hrs. / 6 min
Shelf Life (from Date of Manufacturing, unopened, @ < 30 °C)	Months	12	12
Flammability	UL 94	VO (5.6 mm)	VO (5.6 mm)
RoHS Conformity	2015 / 863 / EU	Yes	Yes
TECHNICAL			
Thermal Conductivity	W/mK	1.2	1.2
Operating Temperature	°C	- 70 bis + 250	- 70 bis + 250
Dielectric Strength	kV/mm	14	14
Volume Resistivity	Ohm - cm	1.8 x 10 ¹⁴	1.8 x 10 ¹⁴
Dielectric Constant	@ 1 kHz	4.53	4.53

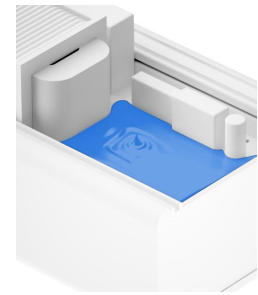
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POLYURETHAN POTTING GEL

TCR-J-PU-2C-LV-AR

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-J-PU-2C-LV-AR is a 2-part addition cure polyurethan potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access



PROPERTIES

- Polyurethan
- Low viscosity
- 2 part addition cure
- Thermal conductivity: 1.5 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Solvent-free
- High resistivity against water and humidity
- Free of halogenated flame retardants

AVAILABILITY

- Tinplate container

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- LED
- Battery packs

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

PROPERTY	UNIT	CASTING RESIN	HARDENER
MATERIAL			
Colour		Blue	Brown
Density (@ 22 °C)	g/cm ³	2.35 – 2.45	1.20 – 1.25
Mixing Ratio	Weight		100 : 8
Viscosity (@ 22 °C, 10 rpm)	mPas	45,000 – 50,000	15 – 35
Viscosity (Mixed, @ 22 °C, 10 rpm)	mPas		3,500 – 5,000
Hardness	Shore D		40 – 50
Tensile Strength	psi		580
Elongation at Break	%		25
Water absorption (30 days @ 23 °C)	%		0.2
Young Modulus	kpsi		9.4
Coefficient of Thermal Expansion			
< T _g , TMA	1 x 10 ⁻⁶ / K		72.5
> T _g , TMA	1 x 10 ⁻⁶ / K		141.7
Curing Shrinkage	%		< 1
Pot Life (100g @ 22 °C / adjustable)	min		25 – 35
Curing Time @ 22 °C / Full chemical hardening	h / days		16 – 30 / 10 – 14
Shelf Life (from Date of Manufacturing, unopened @ 15 – 25 °C)	Months		6
Flammability (Equivalent)	UL 94		V0 (1.5 mm)
RoHS Conformity	2015 / 863 / EU		Ja
Class of Insulation			F
TECHNICAL			
Thermal Conductivity	W/mK		1.5
Operating Temperature	°C		- 50 to + 160
Dielectric Strength	kV/mm		28
Volume Resistivity (@ 23 °C, 50 % rel. H.)	Ohm - cm		1 x 10 ¹⁵
Dielectric Constant (ε _r)	@ 50 Hz / 1 kHz / 1 MHz @ 23 °C		5.6 / 4.5 / 3.9
Dielectric Loss Factor (tan δ)	@ 50 Hz @ 23 °C		0.09
Comparative Tracking Index (CTI)			600

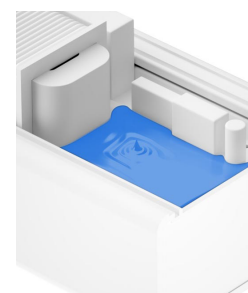
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POLYURETHAN POTTING GEL

TCR-L-PU-2C-LV-AR

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-L-PU-2C-LV-AR is a 2-part addition cure polyurethan potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access.



PROPERTIES

- Polyurethan
- Low viscosity
- 2 part addition cure
- Thermal conductivity: 2.1 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Solvent-free
- High resistivity against water and humidity
- Free of halogenated flame retardants

AVAILABILITY

- Tinplate container

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- LED
- Battery packs

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

PROPERTY	UNIT	CASTING RESIN	HARDENER
MATERIAL		Polyurethan	Aromatic Isocyanate
Colour		Blue	Brown
Density @ 22 °C	g/cm ³	2.4 – 2.5	1.20 – 1.25
Mixing Ratio	Weight		100 : 8
Viscosity (@ 22 °C, 10 rpm)	mPas	100,000 – 120,000	15 – 35
Viscosity (Mixed, @ 22 °C, 10 rpm)	mPas		10,000 – 15,000
Hardness	Shore D		50 – 60
Tensile Strength	psi		870 – 1,160
Elongation at Break	%		9 – 10
Young Modulus	kpsi		8 – 8.7
Curing Shrinkage	%		< 1
Pot Life (100 g @ 22 °C / adjustable)	min		10 – 30
Curing Time @ 22 °C / Full chemical hardening	h / days		16 – 30 / 10 – 14
Shelf Life (from Date of Manufacturing, unopened @ 15 – 25 °C)	Months		6
Flammability (Equivalent)	UL 94		V0 (4.0 mm)
RoHS Conformity	2015 / 863 / EU		Yes
Class of Insulation			B
TECHNICAL			
Thermal Conductivity	W/mK		2.1
Operating Temperature	°C		- 40 to + 165
Dielectric Strength	kV/mm		28
Volume Resistivity (@ 23 °C, 50 % rel. H.)	Ohm - cm		1 x 10 ¹⁵
Dielectric Constant [εr]	@ 50 Hz / 1 kHz / 1 MHz @ 23 °C		5.5 / 4.5 / 3.9
Dielectric Loss Factor (tan δ)	@ 50 Hz @ 23 °C		0.09
Comparative Tracking Index (CTI)			600

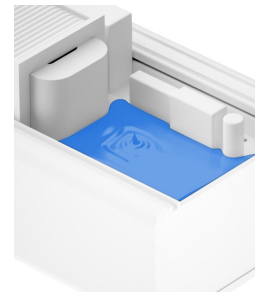
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POLYURETHAN POTTING GEL

TCR-N-PU-2C-LV-AR

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-N-PU-2C-LV-AR is a 2-part addition cure polyurethan potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access.



PROPERTIES

- Polyurethan
- Low viscosity
- 2 part addition cure
- Thermal conductivity: 2.6 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Solvent-free
- High resistivity against water and humidity
- Free of halogenated flame retardants

AVAILABILITY

- Tinplate container

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- LED
- Battery packs

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

PROPERTY	UNIT	CASTING RESIN	HARDENER
MATERIAL		Polyurethan	Aromatic Isocyanate
Colour		Blue	Brown
Density @ 22 °C	g/cm ³	2.3 – 2.4	1.20 – 1.25
Mixing Ratio	Weight		100 : 8
Viscosity (@ 22 °C, 10 rpm)	mPas	100,000 – 140,000	15 – 35
Viscosity (Mixed, @ 22 °C, 10 rpm)	mPas		20,000 – 40,000
Hardness	Shore D		40 – 50
Water absorption (30 days @ 23 °C)	%		0.4
Coefficient of Thermal Expansion			
< T _g , TMA	1 x 10 ⁻⁶ / K		91.4
> T _g , TMA	1 x 10 ⁻⁶ / K		129.1
Curing Shrinkage	%		< 1
Pot Life (100g @ 22 °C / adjustable)	min		10 – 30
Curing Time @ 22 °C / Full chemical hardening	h / days		14 – 24 / 10 – 14
Shelf Life (from Date of Manufacturing, unopened @ 15 – 25 °C)	Months		6
Flammability (Equivalent)	UL 94		VO (4.0 mm)
RoHS Conformity	2015 / 863 / EU		Yes
Class of Insulation			B
TECHNICAL			
Thermal Conductivity	W/mK		2.6
Operating Temperature	°C		- 40 to + 130
Dielectric Strength	kV/mm		31
Volume Resistivity (@ 23 °C, 50 % rel. H.)	Ohm - cm		1 x 10 ¹⁵
Dielectric Constant (ε _r)	@ 50 Hz / 1 kHz / 1 MHz @ 23 °C		5.8 / 5.2 / 4.6
Dielectric Loss Factor (tan δ)	@ 50 Hz @ 23 °C		0.09
Comparative Tracking Index (CTI)			600

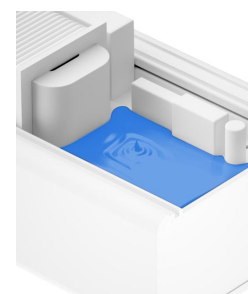
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POLYURETHAN POTTING GEL

TCR-N-PU-2C-MV-AL

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-N-PU-2C-MV-AL is a 2-part addition cure polyurethan potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access



PROPERTIES

- Polyurethan
- Medium viscosity
- 2 part addition cure
- Thermal conductivity: 2.6 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Solvent-free
- High resistivity against water and humidity
- Free of halogenated flame retardants

AVAILABILITY

- Tinplate container

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- LED
- Battery packs

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

PROPERTY	UNIT	CASTING RESIN	HARDENER
MATERIAL		Polyurethan	Aliphatic Isocyanate
Colour		Blue	Transparent
Density @ 22 °C	g/cm ³	2.3 – 2.4	1.10 – 1.15
Mixing Ratio	Weight		100 : 9
Viscosity (@ 22 °C, 10 rpm)	mPas	110,000 – 130,000	450 – 750
Viscosity (Mixed, @ 22 °C, 10 rpm)	mPas		60,000 – 70,000
Hardness	Shore D		40 – 50
Water absorption [30 days @ 23 °C]	%		0.4
Coefficient of Thermal Expansion			
< Tg, TMA	1 x 10 ⁻⁶ /K		137.9
> Tg, TMA	1 x 10 ⁻⁶ /K		162.0
Curing Shrinkage	%		< 1
Pot Life (100g @ 22 °C / adjustable)	min		Adjustable
Curing Time @ 22 °C / Full chemical hardening	h / days		12 – 24 / 10 – 14
Shelf Life (from Date of Manufacturing, unopened @ 15 – 25 °C)	Months		6
Flammability (Equivalent)	UL 94		VO (4.0 mm)
RoHS Conformity	2015 / 863 / EU		Yes
Class of Insulation			B
TECHNICAL			
Thermal Conductivity	W/mK		2.6
Operating Temperature	°C		- 40 to + 130
Dielectric Strength	kV/mm		31
Volume Resistivity (@ 23 °C, 50% rel. H.)	Ohm - cm		1 x 10 ¹⁵
Dielectric Constant (Er)	@ 50 Hz / 1 kHz / 1 MHz @ 23 °C		5.8 / 5.2 / 4.6
Dielectric Loss Factor (tan δ)	@ 50 Hz @ 23 °C		0.09
Comparative Tracking Index (CTI)			600

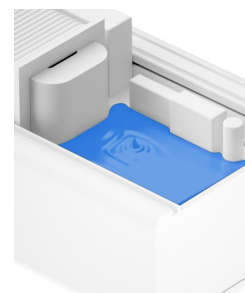
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POLYURETHAN POTTING GEL

TCR-R-PU-2C-LV-AR

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-R-PU-2C-LV-AR is a 2-part addition cure polyurethan potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access.



PROPERTIES

- Polyurethan
- Low viscosity
- 2 part addition cure
- Thermal conductivity: 3.0 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Solvent-free
- High resistivity against water and humidity
- Free of halogenated flame retardants

AVAILABILITY

- Tinplate container

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- LED
- Battery packs

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

PROPERTY	UNIT	CASTING RESIN	HARDENER
MATERIAL		Polyurethan	Aromatic Isocyanate
Colour		Blue	Brown
Density @ 22 °C	g/cm ³	2.3 – 2.4	1.20 – 1.25
Mixing Ratio	Weight		100 : 8
Viscosity (@ 22 °C, 10 rpm)	mPas	110,000 – 150,000	15 – 35
Viscosity (Mixed, @ 22 °C, 10 rpm)	mPas		30,000 – 40,000
Hardness	Shore D		45 – 55
Water absorption (30 days @ 23 °C)	%		0.4
Coefficient of Thermal Expansion			
< T _g , TMA	1 x 10 ⁻⁶ / K		73.9
> T _g , TMA	1 x 10 ⁻⁶ / K		125.3
Curing Shrinkage	%		< 1
Pot Life (100g @ 22 °C / adjustable)	min		10 – 30
Curing Time @ 22 °C / Full chemical hardening	h / days		16 – 30 / 10 – 14
Shelf Life (from Date of Manufacturing, unopened @ 15 – 25 °C)	Months		6
Flammability (Equivalent)	UL 94		VO (4.0 mm)
RoHS Conformity	2015 / 863 / EU		Yes
Class of Insulation			B
TECHNICAL			
Thermal Conductivity	W/mK		3.0
Operating Temperature	°C		- 40 to + 130
Dielectric Strength	kV/mm		28
Volume Resistivity (@ 23 °C, 50 % rel. H.)	Ohm - cm		1 x 10 ¹⁵
Dielectric Constant (ε _r)	@ 50 Hz / 1 kHz / 1 MHz @ 23 °C		5.5 / 4.5 / 3.9
Dielectric Loss Factor (tan δ)	@ 50 Hz @ 23 °C		0.09
Comparative Tracking Index (CTI)			600

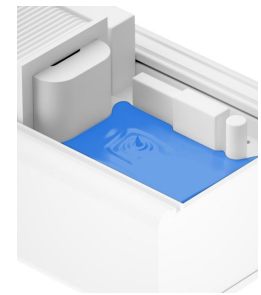
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POLYURETHAN POTTING GEL

TCR-R-PU-2C-MV-AL

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-R-PU-2C-MV-AL is a 2-part addition cure polyurethan potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access.



PROPERTIES

- Polyurethan
- Medium viscosity
- 2 part addition cure
- Thermal conductivity: 3.0 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Solvent-free
- High resistivity against water and humidity
- Free of halogenated flame retardants

AVAILABILITY

- Tinplate container

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- LED
- Battery packs

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

PROPERTY	UNIT	CASTING RESIN	HARDENER
MATERIAL		Polyurethan	Aliphatic Isocyanate
Colour		Blue	Transparent
Density @ 22 °C	g/cm ³	2.4 – 2.5	1.10 – 1.15
Mixing Ratio	Weight		100 : 9
Viscosity (@ 22 °C, 10 rpm)	mPas	160,000 – 185,000	450 – 750
Viscosity (Mixed, @ 22 °C, 10 rpm)	mPas		80,000 – 90,000
Hardness	Shore D		40 – 50
Water absorption [30 days @ 23 °C]	%		0.4
Coefficient of Thermal Expansion			
< Tg, TMA	1 x 10 ⁻⁶ /K		106.8
> Tg, TMA	1 x 10 ⁻⁶ /K		121.5
Curing Shrinkage	%		< 1
Pot Life (100 g @ 22 °C / adjustable)	min		Adjustable
Curing Time @ 22 °C / Full chemical hardening	h / days		16 – 30 / 10 – 14
Shelf Life (from Date of Manufacturing, unopened @ 15 – 25 °C)	Months		6
Flammability (Equivalent)	UL 94		VO (4.0 mm)
RoHS Conformity	2015 / 863 / EU		Yes
Class of Insulation			B
TECHNICAL			
Thermal Conductivity	W/mK		3.0
Operating Temperature	°C		- 40 to + 130
Dielectric Strength	kV/mm		28
Volume Resistivity (@ 23 °C, 50% rel. H.)	Ohm - cm		1 x 10 ¹⁵
Dielectric Constant (Er)	@ 50 Hz / 1 kHz / 1 MHz @ 23 °C		5.5 / 4.5 / 3.9
Dielectric Loss Factor (tan δ)	@ 50 Hz @ 23 °C		0.09
Comparative Tracking Index (CTI)			600

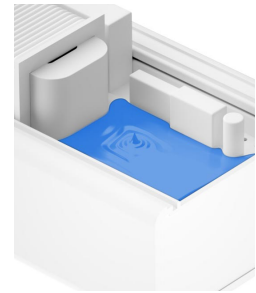
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POLYURETHAN POTTING GEL

TCR-V-PU-2C-MV-AR

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-V-PU-2C-MV-AR is a 2-part addition cure polyurethan potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access.



PROPERTIES

- Polyurethan
- Medium viscosity
- 2 part addition cure
- Thermal conductivity: 3.5 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Solvent-free
- High resistivity against water and humidity
- Free of halogenated flame retardants

AVAILABILITY

- Tinplate container

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- LED
- Battery packs

For use in Automotive applications / Telecommunication / Controlling units / Industrial PCs

PROPERTY	UNIT	CASTING RESIN	HARDENER
MATERIAL		Polyurethan	Aromatic Isocyanate
Colour		Blue	Brown
Density @ 22 °C	g/cm ³	2.1 – 2.3	1.20 – 1.25
Mixing Ratio	Weight		100 : 7
Viscosity (@ 22 °C, 10 rpm)	mPas	100,000 – 130,000	15 – 35
Viscosity (Mixed, @ 22 °C, 10 rpm)	mPas		60,000 – 100,000
Hardness	Shore D		20 – 30
Water absorption (30 days @ 23 °C)	%		0.4
Coefficient of Thermal Expansion			
< T _g , TMA	1 x 10 ⁻⁶ / K		131.5
> T _g , TMA	1 x 10 ⁻⁶ / K		157.4
Curing Shrinkage	%		< 1
Pot Life (100g @ 22 °C / adjustable)	min		10 – 30
Curing Time @ 22 °C / Full chemical hardening	h / days		16 – 30 / 10 – 14
Shelf Life (from Date of Manufacturing, unopened @ 15 – 25 °C)	Months		6
Flammability (Equivalent)	UL 94		VO (4.0 mm)
RoHS Conformity	2015 / 863 / EU		Yes
Class of Insulation			B
TECHNICAL			
Thermal Conductivity	W/mK		3.5
Operating Temperature	°C		- 30 to + 130
Dielectric Strength	kV/mm		28
Volume Resistivity (@ 23 °C, 50 % rel. H.)	Ohm - cm		1 x 10 ¹⁵
Dielectric Constant (ε _r)	@ 50 Hz / 1 kHz / 1 MHz @ 23 °C		5.5 / 4.5 / 3.9
Dielectric Loss Factor (tan δ)	@ 50 Hz @ 23 °C		0.09
Comparative Tracking Index (CTI)			600

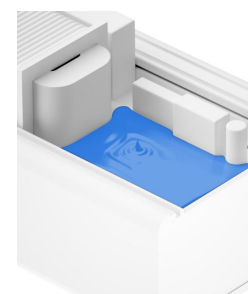
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POLYURETHAN POTTING GEL

TCR-V-PU-2C-HV-AL

DISPENSABLE / 2 PARTS / LOW VISCOSITY

TCR-V-PU-2C-HV-AL is a 2-part addition cure polyurethan potting compound which is filled with thermally conductive fillers of high temperature stability. It is characterised by very good dielectric and mechanic properties and is suited for encapsulating electric and electronic parts such as transformers, capacitors, inductors, sensors, LEDs and can be moulded or dispensed under normal conditions at room temperature or in vacuum. Its rheologic behaviour allows for usage in geometries that are difficult to access.



PROPERTIES

- Polyurethan
- Medium viscosity
- 2 part addition cure
- Thermal conductivity: 3.5 W/mK
- Almost zero stress on components
- Dispensable or mouldable
- Solvent-free
- High resistivity against water and humidity
- Free of halogenated flame retardants

AVAILABILITY

- Tinplate container

APPLICATION EXAMPLES

Thermal link of:

- Inductors
- Capacitors
- LED
- Battery packs

For use in Automotive applications
/ Telecommunication / Controlling
units / Industrial PCs

PROPERTY	UNIT	CASTING RESIN	HARDENER
MATERIAL		Polyurethan	Aliphatic Isocyanate
Colour		Blue	Transparent
Density @ 22 °C	g/cm ³	2.1 – 2.3	1.10 – 1.15
Mixing Ratio	Weight		100 : 9
Viscosity (@ 22 °C, 10 rpm)	mPas	150,000 – 200,000	450 – 750
Viscosity (Mixed, @ 22 °C, 10 rpm)	mPas		110,000 – 130,000
Hardness	Shore D		35 – 45
Water absorption [30 days @ 23 °C]	%		0.4
Coefficient of Thermal Expansion < Tg, TMA	1 x 10 ⁻⁶ /K		156.2
> Tg, TMA	1 x 10 ⁻⁶ /K		187.9
Curing Shrinkage	%		< 1
Pot Life (100g @ 22 °C / adjustable)	min		30 – 50
Curing Time @ 22 °C / Full chemical hardening	h / days		16 – 30 / 10 – 14
Shelf Life (from Date of Manufacturing, unopened @ 15 – 25 °C)	Months		6
Flammability (Equivalent)	UL 94		VO (5.6 mm)
RoHS Conformity	2015 / 863 / EU		Yes
Class of Insulation			B
TECHNICAL			
Thermal Conductivity	W/mK		3.5
Operating Temperature	°C		- 40 to + 130
Dielectric Strength	kV/mm		28
Volume Resistivity (@ 23 °C, 50% rel. H.)	Ohm - cm		1 x 10 ¹⁵
Dielectric Constant (Er)	@ 50 Hz / 1 kHz / 1 MHz @ 23 °C		5.5 / 4.5 / 3.9
Dielectric Loss Factor (tan δ)	@ 50 Hz @ 23 °C		0.09
Comparative Tracking Index (CTI)			600

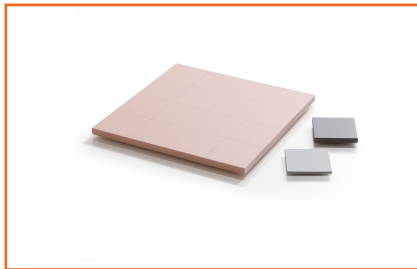
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KØLEPROFILER



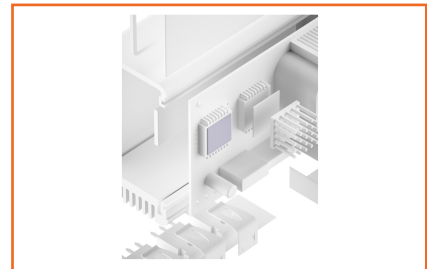
VORES PRODUKTSORTIMENT INKLUDERER:



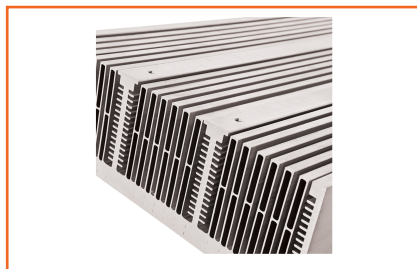
SARCON GAP FILLER TYPE



SARCON GENERELT



PHASE CHANGE MATERIAL



HIGH PERFORMANCE



EKSTRUDEREDE



KØLEPROFILER

VI FØRER PRODUKTER INDENFOR KATEGORIERNE:



AUTOMATIK



**HVAC & BYGNINGS-
AUTOMATIK**



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