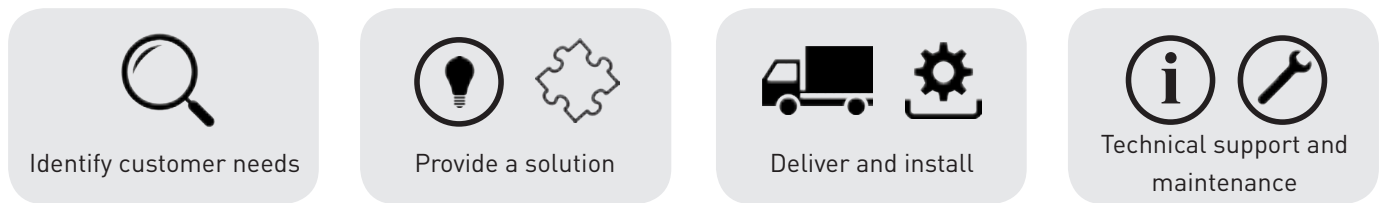


# Products for the Electronics Industry



Uv Spot Curing Solutions, Desktop Robots, Lead-Free Solder Solutions,  
Silicones and Epoxy for Electronics, PU Casting Resins



YTM Industrial Oy aims to serve the Finnish industrial sector through the supply of technical components and equipment.

YTM Industrial Oy was grounded in 1977. The company has been part of the international Indutrade Group since the year 1987.

YTM's comprehensive service is focussed on providing solutions for the individual needs of our customers in the most technologically and economically suitable way possible.

We offer comprehensive solutions to meet our customers' needs in a range of business areas, including equipment deliveries, installation as well as spare parts and maintenance services.

We operate cost-effectively by concentrating on the management and development of already established areas of business as a

part of the Indutrade Group's Finnish branch of operations.

We aim for profitable growth in selected and established areas of business that hold a significant market share and market position. Our goal is therefore to concentrate on and develop existing areas of business.

## Indutrade Group

YTM-Industrial has been part of the international Indutrade Group since the year 1987. Indutrade has over 160 subsidiaries in 24 different countries at four different continents. Indutrade employs globally over 3400 professionals.

Indutrade Oy Finland is the owner of Finnish subsidiaries. Indutrade is listed on the Nasdaq OMX Stockholm, Large Cap list under Industrials.



Indutrade subsidiaries in Finland



Indutrade subsidiaries around the world

## Lumen Dynamics OmniCure S2000

The OmniCure® S2000 spot UV curing lamp system offers the highest level of process control and consistency with real-time Closed-Loop Feedback technology using an integrated optical UV sensor.

- The OmniCure® S2000 with Intelli-Lamp® technology have a guaranteed 2000-hour lifetime and up to 4000-hour typical lifetime
  - Snap-in insertion and built-in reflector optimize the light energy coupled to the light guide without operator alignment or focusing.
  - The Intelli-Lamp® technology automatically maintains the lamp hours directly on the lamp to facilitate activation of lamp warranty if required.
  - The broad spectral output across the UV and visible spectrum, make it suitable for a wide range of adhesive/substrate bonding applications.
  - OmniCure® systems automatically detect the Intelli-Lamp® technology ensuring the benefits without the need for operator intervention.
- 
- When paired with an **OmniCure® R2000 radiometer**, the S2000 light curing system is unmatched in precision light delivery and repeatable adhesive curing results.



## Janome Desktop Robots

The JR Series Desktop robots are designed to minimize footprint and maximize efficiencies in assembly line operations. This design increases the efficiency of workers in order to reduce labour content.

### Application Examples

- Dispensing
- Screw Fastening
- Soldering
- Vision Inspection
- Board Cutting
- Routing Robot
- Router Spindle

### Features

- Compact size table top robot
- Application specific software
- Easy to use teaching pendant with large 13-line screen
- Optional PC software package
- Memory Capacity of up to 255 programs and/or 30,000 points
- Ample interface for even most complicated assembly operations
- Capable of simultaneous control of up to four axes
- CE certified
- Supplied with remote operation start & stop box and a safety interlock connector



On July 1, 2006 the European Union Waste Electrical and Electronic Equipment Directive (WEEE) and Restriction of Hazardous Substances Directive (RoHS) came into effect prohibiting the intentional addition of lead to most consumer electronics produced in the EU.



Kester Solder has been a worldwide supplier of soldering products since its inception in 1899. Today, Kester Solder is a leading worldwide manufacturer of solders and related materials for the electronics manufacturing industry.



## Solder pastes

The key variables in lead-free SMT are the higher reflow temperatures, flux activity, residue characteristics, cleanability, and pin testability. The slower wetting speeds associated with lead-free alloys require enhanced flux systems. Kester solder pastes have innovative flux systems that are specifically designed for lead-free assembly.



## Liquid fluxes

Lead-free wave and selective soldering require exposing the flux to slightly higher soldering temperatures. Lead-free alloys traditionally wet metal surfaces more slowly than tin-lead. Kester liquid fluxes for lead-free assembly have new activator packages to enable rapid wetting and hole-filling, ensuring reliable product output.



## Solid wire solder

Lead free solder wires that offers superior wetting performance leaving an extremely clear post-soldering residue. Designed to reduce splattering common to most core fluxes, this no-clean flux eliminates the need and expense of cleaning.



## Bar solder

Kester E-Bar is designed for electrical, electronic and mechanical applications requiring bar solder that meets or exceeds the requirements of QQ-S-571-F, ASTM B32, and ANSI/J-STD-006.



Dow Corning Electronics is a globally integrated provider of materials, application technology and services. Dow Corning is a top-rated supplier in the electronics value chain – from semiconductor fabrication, to device packaging and complete module and system assembly. Our wide Dow Corning product range can be found from the next two pages.



## Gels

- Long-term performance
- Stress relief for underlying circuitry
- Processing flexibility
- Easy repairability
- Good clarity
- Excellent fire resistance
- Strong, positive, unprimed adhesion to most common metals and plastics used in electronics applications, including epoxy glass laminates used in circuit boards

## Adhesives and Sealants

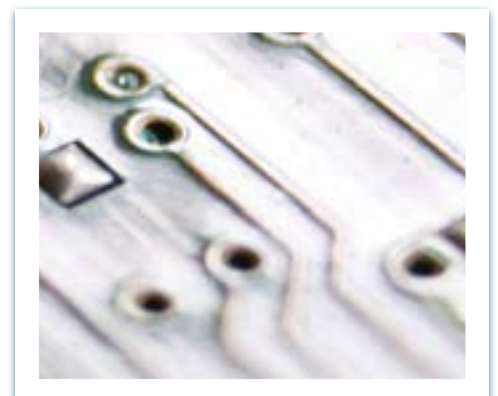
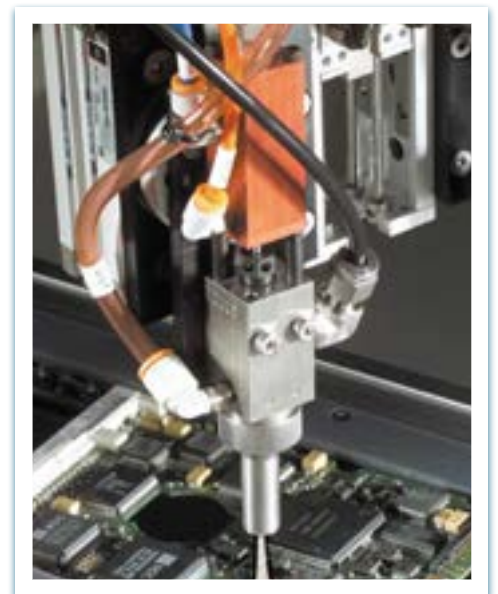
- Excellent electrical properties
- Good weather resistance
- Stability and flexibility over a wide temperature range
- Outstanding (normally primerless) adhesion to a variety of substrates
- Heat accelerated or room temperature cures
- Better flexibility and a broader service temperature range than epoxy adhesives and sealants
- Stronger unprimed adhesion to metal substrates and a broader service temperature range than urethane adhesives

## Conformal Coatings

- Excellent dielectric properties
- Temperature, oxidative and UV stability
- Outstanding water repellency
- Thermal shock and abrasion resistance
- Good chemical stability, low toxicity
- Rapid room temperature or heat cure
- Easy application with standard equipment
- Robust adhesion
- Easy viscosity fine-tuning

## Thermally Conductive Materials

- Excellent dielectric properties
- Temperature, oxidative and UV stability
- Good chemical stability
- Application with standard equipment
- Stability over a wide temperature range



## Molding Silicones and Gels

Product	Curing method (mixing ratio)	Color	Viscosity mPa.s	Hardness	Specific Gravity	Pot Life at RT	Room Temp Cure Time	Heat Cure Time	Unprimed Adhesion Lap Shear (MPa)	Thermal Conductivity (W/m-K)	Dielectric strength (kV/mm)	Classifications	Key features
Sylgard® 170	Add (1:1)	Black	2,900	40 (A)	1,37	15 min	24 h	20 min @ 70°C	ES	0,40	18,9	UL94 V-0/Mil Spec	Flame retardant UL 94-V0 elastomer
Sylgard® 170 Fast Cure	Add (1:1)	Black	2,850	42 (A)	1,37	< 5 min	10 min	10 min @ 25°C	ES	0,40	20,9	UL94 V-0	Fast cure at room temperature
Dow Corning® SE 1816CV	Add (1:1)	Black	2,400	38 (A)	1,36	24 h	ES	60 min @ 100°C	1,45	0,40	26,0	UL94 V-0	Self-priming at low temperature, controlled volatility
Sylgard® 184	Add (10:1)	Clear	3,900	50 (A)	1,03	> 2 h	48 h	45 min @ 100°C	ES	0,18	21,2	UL94 V-1/Mil Spec	Optically clear - room temperature cure
Sylgard® 186	Add (10:1)	Translucent	65,000	24 (A)	1,12	2 h	48 h	30 min @ 100°C	ES	0,20	17,7	UL94 V-1	High tear strength
Dow Corning® 255	Kond (10:1)	Black	5,500	25 (A)	1,30	< 5 min	4 h*	ES	0,3	0,26	25,0	ES	Self-priming, condensation cure, fast cure
Sylgard® 527	Add (1:1)	Clear	425	45 (A)	0,97	90 min	24 h	30 min @ 100°C	ES	0,15	15,1	ES	Purity tested gel
Dow Corning® SE 1880	Add (1-komp)	Clear	800	85 (P)	0,97	ES	ES	30 min @ 150°C	ES	ES	20,0	ES	One part low temperature resistant gel
Dow Corning® 3-4150	Add (1:1)	Translucent green	475	50 (P)	0,97	7 min	45 min	45 min @ 25°C	ES	0,18	15,1	ES	Fast cure at room temperature, general purpose gel
Dow Corning® 3-4207	Add (1:1)	Translucent green	425	60 (00)	0,97	< 10 min	15 min	15 min @ 25°C	ES	0,15	16,5	UL94 V-1	Tough gel - Self-priming at room temperature
Dow Corning® 3-4241	Add (1:1)	Translucent green	435	60 (00)	0,98	< 1 h	8 h	2 min @ 125°C	ES	0,15	17,3	UL94 V-1	Tough gel - Long working time version of DC 3-4207
Dow Corning® 3-6575	Add (1:1)	Clear	740	80 (P)	1,02	20 min	5 h	10 min @ 100°C	ES	0,15	10,0	ES	Low temperature gel (-80°C)
Dow Corning® 3-6679	Add (1:1)	Clear	1,150	30 (P)	1,26	> 240 min	24 h	20 min @ 100°C	ES	0,14	13,8	ES	Fuel and solvent resistant gel
Dow Corning® 93-500	Add (10:1)	Translucent	8,000	40 (A)	1,03	2,5 h	ES	30 min @ 100°C	ES	0,20	14,8	ES	Space grade encapsulant
Dow Corning® SE 1740	Add (1:1)	Translucent	900	34 (00)	1,00	24 h	ES	30 min @ 80°C	0,2	ES	17,0	ES	Self-priming at low temperature
Dow Corning® CY51-065	Kond (10:1)	White	2,200	19 (A)	1,06	3 h	72 h	ES	0,5	ES	24,0	ES	Self priming, condensation cure, long pot life

\*Adhesion 24 h

## Adhesives and Sealants

Product	Curing method (mixing ratio)	Color	Viscosity mPa.s	Hardness	Specific Gravity	Pot Life at RT	Room Temp Cure Time	Heat Cure Time	Unprimed Adhesion Lap Shear (MPa)	Thermal Conductivity (W/m-K)	Dielectric strength (kV/mm)	Classifications	Key features
Dow Corning® 744	Kond (1-komp)	White	Tahna	39 (A)	1,40	30 min TFT	48 h	ES	ES	ES	16,0	ES	Excellent adhesion to many substrates
Dow Corning® 866	Add (1-komp)	Dark grey	48,000	56 (A)	1,28	ES	ES	1 h @ 120°C	4,9 MPa	0,28	19,0	ES	Flowable heat cure adhesive
Dow Corning® 3140	Kond (1-komp)	Translucent	30,000	32 (A)	1,03	70 min TFT	72 h	ES	5,9 kN/m	0,18	17,5	UL/Mil Spec	Flowable MIL-A-46146
Dow Corning® 3145	Kond (1-komp)	Translucent/Grey	Valumaton	50 (A)	1,12	70 min TFT	48 h	ES	13,2 kN/m	0,18	20,1	UL/Mil Spec	High strength - MIL-A-46146
Dow Corning® 1-9225	Add (10:1)	White	Tahna	47 (A)	1,13	24 h	ES	1 h @ 100°C	3,4 MPa	ES	18,0	ES	Thixotropic 2 components adhesive
Dow Corning® 3-1944	Kond (1-komp)	Translucent	65,725	29 A	1,03	ES	48 h	ES	ES	ES	17,0	UL 94V-0/ MIL-A-46058	Flowable, UL 94V-0 and Mil-A-46058,
Dow Corning® 3-6265	Add (1-komp)	Black	Valumaton	68 (A)	1,34	ES	ES	30 min @ 150°C	3,8 MPa	0,35	21,1	ES	Thixotropic 1 component adhesive
Dow Corning® 3-6611	Add (1-komp)	Black/Grey	85,000	60 (A)	1,31	ES	ES	30 min @ 150°C	5,4 MPa	0,32	13,8	ES	Flowable 1 component adhesive
Dow Corning® 3-6093	Cond (10:1)	Black	Tahna	45 (A)	1,37	< 20 min	90 min	ES	1,6 MPa / 1,8 kN/m	0,31	20,1	ES	Self-priming, condensation cure, fast RT cure
Dow Corning® Q5-8401	Add (1:1)	Dark grey	76,000	60 (A)	1,31	24 h	ES	1 h @ 100°C	5,0 MPa	ES	20,0	ES	Flowable
Dow Corning® 6-1104	Kond (1-komp)	Translucent	Tahna	42 (A)	1,10	55 min TFT	48 h	ES	1,5 MPa / 4,7 kN/m	0,20	21,3	ES	Space grade sealant
Dow Corning® 96-083	Add (10:1)	Translucent	9,500	56 (A)	1,08	2 h	ES	1 h @ 120°C	6,9 Mpa / 7 kN/m	ES	20,0	ES	Flowable, transparent - Chemical stability
Dow Corning® SE 9168	Kond (1-komp)	Grey	Tahna	46 (A)	1,32	6 min TFT	48 h	ES	2,1 MPa	ES	26,0	UL 94 V-0	94 V-0 Controlled volatility. Fast tack-free time, high tensile strength
Dow Corning® SE 9186	Kond (1-komp)	Translucent/White	63,000	20 (A)	1,04	9 min TFT	48 h	ES	1,6 MPa	ES	23,0	ES	Controlled volatility. Fast tack-free time
Dow Corning® SE 9187 L	Kond (1-komp)	Black/Clear/White	1,00	17 (A)	1,00	9 min TFT	48 h	ES	0,3 MPa	ES	23,0	UL 94 HB (Black)	Controlled volatility. Fast tack-free time. Low viscosity



## Protective Coatings

Product	Curing method (mixing ratio)	Color	Viscosity mPa.s	Hardness	Specific Gravity	Pot Life at RT	Room Temp Cure Time	Heat Cure Time	Unprimed Adhesion Lap Shear (MPa)	Thermal Conductivity (W/m-K)	Dielectric strength (kV/mm)	Classifications	Key features
Dow Corning® 3140	Kond (1-komp)	Translucent	30,000	32 (A)	1,03	70 min	72 h	ES	5,9 kN/m	0,18	17,5	UL/Mil Spec	Elastomeric coating, solventless
Dow Corning® 1-2577	Kond (1-komp)	Clear	725	23 (D)	1,04	20 min	72 h	ES	ES	0,18	15,8	UL/Mil Spec	Elastoplastic; Solvent based resin
Dow Corning® 1-2577 Low Voc	Kond (1-komp)	Clear	1,250	25 (D)	0,88	20 min	72 h	ES	ES	0,18	13,4	UL/Mil Spec	Elastoplastic; OS fluid based resin
Dow Corning® 1-2620 Low Voc	Kond (1-komp)	Clear	250	25 (D)	0,88	20 min	72 h	ES	ES	0,18	16,2	UL/Mil Spec	Low viscosity version of DC 1-2577 Low VOC
Dow Corning® 1-4128	Add (10:1)	Clear	450	64 (00)	0,97	ES	ES	20 min @ 85°C	ES	0,18	22,0	ES	Solventless coating, heat cure
Dow Corning® 3-1944	Kond (1-komp)	Translucent	60,000	29 (A)	1,03	13 min	24 h	ES	ES	ES	16,7	UL94 V-0	High viscosity
Dow Corning® 3-1953	Kond (1-komp)	Clear	360	26 (A)	0,99	10 min	24 h	ES	ES	ES	16,1	UL94 V-0	Heat accelerable, elastomeric coating
Dow Corning® 3-1965	Kond (1-komp)	Clear	110	29 (A)	0,99	5 min	24 h	ES	ES	ES	17,8	UL94 V-0	Sprayable elastomeric coating
Dow Corning® HC 2000	Kond (1-komp)	Translucent	130	25 (A)	1,01	15 min	90 min	ES	ES	ES	33,0	ES	Elastomeric coating, controlled volatility, low viscosity
Dow Corning® SE 9187 L	Kond (1-komp)	Clear/White/Black	1,100	17 (A)	1,00	9 min	0,5 h	ES	0,3 MPa	ES	20,0	UL94	Elastomeric black or white coating

## Thermally Conductive Materials

Product	Curing method (mixing ratio)	Color	Viscosity mPa.s	Hardness	Specific Gravity	Pot Life at RT	Room Temp Cure Time	Heat Cure Time	Unprimed Adhesion Lap Shear (MPa)	Thermal Conductivity (W/m-K)	Dielectric strength (kV/mm)	Classifications	Key features
Dow Corning® 1-4173	Add (1-komp)	Grey	58,000	92 (A)	2,70	ES	ES	90 min @ 100°C	4,4	1,90	16,7	ES	Rapid heat cure; high thermal conductivity adhesive
Dow Corning® 1-4174	Add (1-komp)	Grey	58,000	92 (A)	2,71	ES	ES	90 min @ 100°C	4,0	1,90	16,7	ES	Same as DC 1-4173 adhesive, with spacer beads
Dow Corning® 3-3600 / SE 4410	Add (1:1)	Grey	4,700	87 (A)	2,13	24 h	ES	1 h @ 100°C	ES	0,77	26,0	UL94 V-1	Self-priming, long pot life, excellent flow encapsulant
Dow Corning® 1-9226 / SE 4400	Add (1:1)	Grey	50,000	66 (A)	2,13	16 h	ES	1 h @ 100°C	2,1	0,74	25,0	ES	Semi-flowable, long pot life 2-part adhesive
Dow Corning® SE 4486	Kond (1-komp)	White	19,000	78 (A)	2,59	4 min TFT	48 h	ES	1,4	1,53	13,0	ES	One part moisture cure, flowable, fast tack-free time
Dow Corning® SE 9184	Kond (1-komp)	White	Tahna	72 (A)	2,22	2 min TFT	48 h	ES	2,1	0,84	20,0	UL94 V-0	One part moisture cure, flowable, fast tack-free time
Dow Corning® SE 4402	Add (1-komp)	Grey	34,000	74 (A)	2,16	ES	ES	30 min @ 150°C	3,3	0,92	26,0	ES	Controlled volatility adhesive
Dow Corning® SE 4445	Add (1:1)	Grey	14,000	57 (A)	2,36	6 h	ES	30 min @ 120°C	ES	1,34	5,0	UL94 V-0	Thermally conductive gel
Dow Corning® SE 4490	Tahna	White	500,000	ES	2,62	ES	ES	ES	ES	1,71	35,0	ES	High thermal conductivity compound
Dow Corning® SC 102	Tahna	White	Valumaton	ES	2,37	ES	ES	ES	ES	0,80	21,7	ES	Moderate thermal conductivity compound
Dow Corning® 340	Tahna	White	Valumaton	ES	2,10	ES	ES	ES	ES	0,59	8,3	ES	High temperatures
Dow Corning® 3-6652 **	Add (1:1)	Grey	39,423	12 (A)	2,70	2 h	24 h	1 h @ 60°C	ES	1,71	14,1	ES	Thixotropic gap filler
Dow Corning® 3-6655 **	Add (1:1)	Grey	12,190	12 (A)	2,70	2 h	24 h	1 h @ 60°C	ES	1,71	11,8	ES	Good flow, high thermal conductivity gap filler

\*\* Preliminary data - The information contained here was derived from laboratory and pilot production. Dow Corning believes it is an accurate description of the typical characteristics and/or potential uses of the product or products as characterized to date.

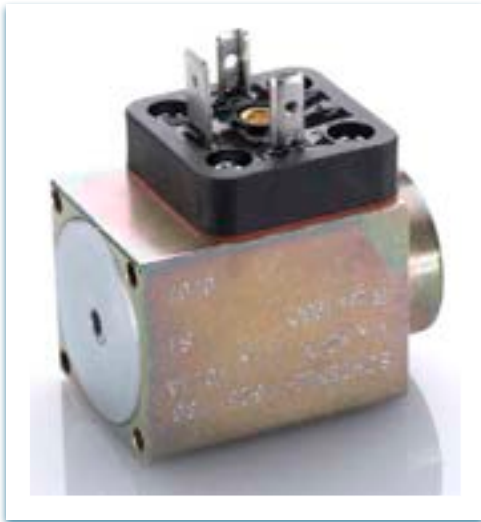
## Primers

Product	Color	Lluotin	Flashpoint °C	VOC g/l	Surfaces
Dow Corning® 1200 OS	Väritön neste	Haihtuva siloksaani	27	110	All
Dow Corning® 1200	Clear/Punainen	Nafta	13	748	All
Dow Corning® 1205	Clear	Sekoitus	13	861	Most plastics

## Cleaning Fluids

Product	Color	Viscosity	Weight	Flashpoint °C	Dryer
OS® 10	Clear	0,65	0,76	-3	Acetone
OS® 20	Clear	1,00	0,82	34	IPA
OS® 120	Clear	0,65	0,77	-4	Acetone





## Protect electronic components

- In transformers, chokes, transducers, magnetic coils, capacitors, proximity switches, varistors, linear motors, stators, circuit boards, electromagnets, LED panels, pumps, switches, plugs, cable bushings and explosion proof components, our casting systems ensure that current can flow safely.
- They insulate and protect electronic components from humidity and water, dust and foreign particles. They optimize the insulation values and help dissipating heat from the components.
- In electrical applications, the demands on quality and reliability are at a maximum. For these uses, we provide polyurethanes with UL recognition, sealing compounds up to insulation Class F, and hot melts for low-pressure injection molding.



## Selection guide

WEVO-polyuretaanivaluhartsit		PD 4	PD 52	PD 4431 FL	PU 304	PU 309	PU 323
WEVO-kovete		385	385	300	300	300	300
Mixing ratio (parts by weight)		100:34	100:26	100: 11	100:50	100 :30	100 : 10
Mixed viscosity at 22°C [mPa·s]	Rotational viscometer	1.200-1.600	1.200-2.000	1.700-2.100	400-600	650-900	700-800
Pot life, 22°C[min.]		10-30	10-40	10-25	15-70	15-50	5-70
Density of resin-component at 22°C [g/cm3]		0,91-0,93	1,06-1,09	1,29-1,31	0,98-1,02	1,23-1,26	1,03-1,06
Density of hardener-component at 22°C [g/cm3]		1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24
Shore-hardness A/D	ISO 868, DIN53505	70 - 78/--	75 - 80/--	56 - 64/--	--/45-50	85-90/35-40	45-50/--
Operating temperature [°C]		-60°C-125°C	-60°C-125°C	-60°C-125°C	-20°C-120°C	-40°C-120°C	-40°C-130°C
Tensile strength [N/mm2]	82072	9	9	6	10	9	1
Elongation at break [%]	SO527-2	210%	210%	180%	80%	93%	48°10
Thermal conductivity [W/m·K]	ISO8894	0,22	0,3	0,42	0,2	0,3	0,2
Water absorption [%]	30 days, 22°C	0,2%	0,5%	0,2%	0,4%	0,4%	4,1%
Flammability	UL 94	HB	HB	V-0 <sup>***</sup>	HB	HB	HB
Dielectric strength [kV/mm]	IEC 602243-1	25	23	22	24	30	19
Volume resistance [Ω·cm]	IEC 60093DIN VDE0303, T1.30	4,2 · 10 <sup>14</sup>	4 · 10 <sup>14</sup>	10 <sup>15</sup>	10 <sup>14</sup>	9,8 · 10 <sup>13</sup>	7,1 · 10 <sup>10</sup>
Dielectric constant at 50 Hz, 23°C	IEC 60250DIN VDE0303, T1.4	3,1	3,0	3,0	3,4	4,4	7,4
Remarks		low water absorption, flexible	high flexibility	flexible, good adhesion	low viscosity PU	univ. applic. PU	flexible, high temperature resistant





PU 390 300	PU 403 300	PU 403 FL 300 RE	PU 520 300	PU 552 FL 300	PU 570 300	PU 925/1M 600	PU 9251 FL 300 RE	PU 930 M 600	PU7210FL/30 507
100:30	100 : 14	100: 14	100:33	100 :20	100 : 20	100 : 33	100: 15	100:33	100:35
800-900	2.500-3.500	2.000-2.500	900-1.000	1.000-1.300	1.500-2.000	850-1.100	2.000-3.000	1.800-2.200	800-900
5-50	1-60	2-45	2-60	2-50	10-50	5-40	15-40	10-45	10-30
1,28-1,31	1,75-1,79	1,62-1,65	1,32-1,35	1,56-1,60	1,56-1,59	1,23-1,25	1,53-1,56	1,39-1,42	1,62-1,66
1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24	1,20-1,24
--/38-42	--/65-75	--/60-70	--/70-75	--/65-70	--/65-70	--/70-75	85-90/35-40	--/72-78	--/85-90
-40°C-130°C	-50°C-165°C	-50°C-165°C	-25°C-125°C	-40°C-130°C	-25°C-130°C	-40°C-125°C	-40°C-135°C	-40°C-140°C	-40°C-145°C
7	9	9	6	6	6	6	7	8	70
88°10	40°10	40°10	65%	62%	60%	100°10	80°10	45°10	10%
0,4	0,6	0,65	0,35	0,61	0,56	0,3	0,62	0,36	0,71
0,3%	0,7%	0,6%	0,3%	0,4%	0,4%	2,0%	1,3%	1,0%	0,3%
V-2 <sup>mm</sup>	HB	V-0 <sup>mm</sup>	HB	V-0 <sup>mm</sup>	HB	HB	V-0 <sup>mm</sup>	HB	V-0 <sup>mm</sup>
32	30	30	30	29	28	22	27	31	28
6,7 · 10 <sup>14</sup>	1,9 · 10 <sup>14</sup>	1,9 · 10 <sup>14</sup>	10 <sup>14</sup>	5 · 10 <sup>13</sup>	10 <sup>14</sup>	6,7 · 10 <sup>12</sup>	10 <sup>12</sup>	3 · 10 <sup>14</sup>	10 <sup>14</sup>
5,5	5,7	5,7	4,8	5,6	5,6	7,5	7,8	5,5	4,2
univ. applic. PU	thermal class F	thermal class F	univ. applic. PU	univ. applic., UL 1446	univ. applic. PU	good performance in temp. cycling test	good temp. and vibration resistance	good adhesion, good chem. resist	High HDT (heat distortion temperature)



NuSil Technology, the global leader in space-grade silicones, brings over 30 years of success developing products for the most extreme environments, from deep inside the human body to the harsh conditions of outer space.

Supported by our high-touch approach to customer care, our best-in-class product lines are the choice across the aerospace, defense, optoelectronics and general electronics industries.

- After 30 years serving the most demanding industries, we've honed our processes and proprietary equipment to deliver customization at a mass scale.
- Developed in direct response to our work in the most challenging environments, NQS is a systematic approach to achieving consistent quality that goes far beyond what you'd expect.
- All materials are either developed or qualified in our own laboratories, under our global R&D and quality standards. With each facility being ISO 9001 and AS 9100 certified, we ensure consistent process and standards around the globe.

## Epo-Tek Specialty Epoxy and Adhesives



Epoxy Technology, Inc., founded in 1966, is a pioneer in the development and manufacture of Specialty Epoxy, UV & UV Hybrid adhesives to meet key performance standards needed in high-tech applications.

EPO-TEK products are routinely specified for critical design requirements in advanced technology industries world-wide; now celebrating our 50th year. Epoxy Technology is very proud of our extensive quality programs, including ISO 9001:2008 and MIL-STD 883/5011 certifications, as well as RoHS Compliance and Sony Green Partnerships.

EPO-TEK® produces a full range of high performance adhesives and coatings for numerous markets including:

- Semiconductor
- Optoelectronic
- Medical
- Automotive
- Fiber Optics
- Photovoltaic
- Military/Aerospace
- Electronics Assembly





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