SAGAR
THERMAL MATERIALS

SAGAR THERMAL MATERIALS

COMPANY BROCHURE

MARCH
2026

ADDRESS

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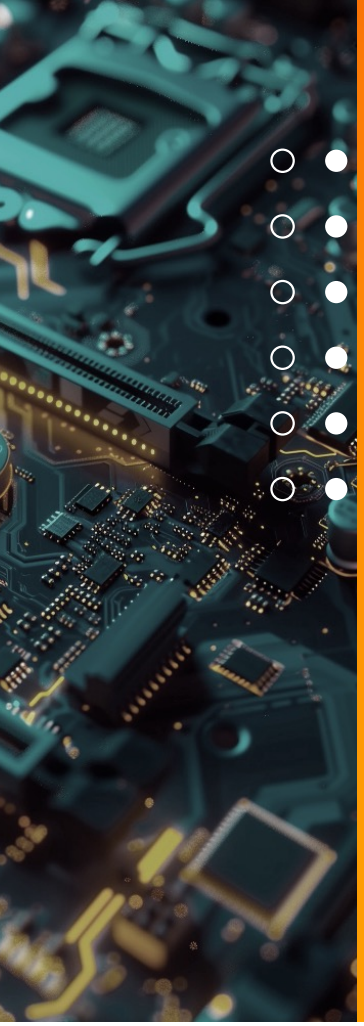


COMPANY OVERVIEW

Sagar Thermal Materials is one of India's first dedicated Thermal materials companies, driving the formulation and new product development in India for thermal management solutions.

We have a portfolio of thermal materials coatings, adhesives, and encapsulants for the electronics, battery, electric vehicle, and semiconductor industries. Our R&D facilities and future manufacturing site are based in Telangana, India to localize the complete process.

Our founding team is composed of industry veterans from Boston Consulting Group and MIT. Additionally, the team has developed years of strong relationships by developing and supplying technology to companies like TVS, BMW, Minda and many others.

Currently, we are building up a local team composed of R&D specialists, operations managers, and business development engineers.

Founded in 2024, we are part of the publicly traded Sagar Group of Companies that have a turnover of ~400 million USD.

COMPANY OFFICES

INDIA:

Administration Office
Plot No. 111, Road No. 10,
Jubilee Hills, Hyderabad,
India – 500033

Manufacturing Unit
152/A, Sri Venkateswara Co-operative Industrial Estate,
IDA Bollaram, Telangana – 502325

JAPAN:

No 14 SHELL MIYAKO V 3F 1-2-5,
Nakamachi, Machida City, Tokyo,
Japan 〒194-0021

FOUNDING TEAM & ADVISORS

KRANTI VISTAKULA,
FOUNDER & MANAGING DIRECTOR

Serial entrepreneur and thermal management expert. As the founder of Dhama Innovations, Kranthi has been the brain behind the ClimaCon Technology (a groundbreaking invention that regulates temperature). He has won several awards including the prestigious MIT Technology Reviews Innovators Under 35. He is a visionary entrepreneur who consistently pushes the boundaries of conventional thinking, devising cutting-edge solutions that tackle complex challenges. Kranti is an alumnus of Massachusetts Institute of Technology (MIT).

KEDAR REDDY,
FOUNDER & DIRECTOR

Kedar Reddy has a strong background in strategy and corporate finance having worked on deals spanning over $200 billion. His career at prestigious firms such as Boston Consulting Group and Lazard equipped him with valuable skills and insights. With extensive knowledge across the private equity, energy, technology, and industrial sectors, Kedar adeptly navigates complex financial and strategic matters. He is an alumnus of Cambridge University and London School of Economics.

RAM DORNALA,
STRATEGIC ADVISER

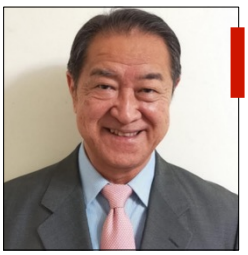
Ram Dornala is our Senior Advisor responsible for international partnerships and supply chain management. He most recently was the head for global operations at Cyient DLM with a primary focus on expanding the global geographic footprint of the organization. Previously he held senior leadership positions at Wistron and Jabil. He has vast experience in defining and executing corporate-level manufacturing strategies and held various leadership positions in Supply Chain Management, setting up green field manufacturing plants, and transitioning products to low-cost countries. Ram holds a Master's degree in Industrial Engineering from Western Michigan University.

KUMAR PRASAD TELIKEPALLI,
TECHNICAL ADVISOR

Kumar is a globally recognized Industry leader in Power Electronics, eMobility & Energy Management Solutions. He has more than two decades of experience in leadership roles at Matter, Eaton & Mahindra. He is currently the Co-Founder & CTO at MATTER- a new age tech startup in eMobility & Energy sectors. He was Chairman for SIAM in 2018 and also recognized as "Power 100 leader in 2024" by eMobility+ for influencing the Mobility landscape.

URUSHIMA MICHITAKA,
JAPAN / OPERATIONAL ADVISOR

Over 35 years of experience in the semiconductor industry, Mitchitaka has experience in setting up numerous ATMP and OSAT production lines in China, the Philippines, Thailand, South Korea, Taiwan, and Japan. Has worked for leading semiconductor companies including NEC. He is an expert in various thermal management products for the semiconductor industry including molding compounds, epoxy resins, and dispensing equipment.



KEN NAGASHIMA,
TAIWAN / OPERATIONAL ADVISOR

Semiconductor industry veteran for 40+ years, Nagashima has been involved in the overall semiconductor business including manufacturing. Has worked for leading semiconductor companies including NEC. Founder of Eclipse Technology which supplies heat spreaders, underfills, die attaches for the semiconductor industry. Current customers include large companies such as AMKOR.

COMPANY MISSION

INNOVATE IN INDIA

We want to build on the existing R&D capabilities that India possesses and ensure we are building an ecosystem of R&D professionals that can work directly with Indian companies to develop thermal management solutions.

As India shifts from "Package in India" to truly "Make in India", thermal management products will also need to be made locally. Our mission is to make all of our products in India. This will truly have an impact on the local economy.

MAKE IN INDIA

BRING NEW TECH TO INDIA

We are partnering with Industry leaders around the globe and working with them to bring new technologies to India. Using these technologies, we will develop customized solutions for Indian customers as per local needs.

OUR CAPABILITIES

R&D & NPD SUPPORT

We will partner with clients' R&D teams to provide support to meet their existing thermal management challenges. By partnering with Sagar Thermal, customers will be able to develop new products at a faster speed with the support of our industry experts.

APPLICATION ENGINEERING

Our team of experienced application engineers are able to develop the appropriate problem statements and translate real world problems into practical solutions. They will ensure the selection of the appropriate thermal solution, every time.

DISPENSING & MIXING

Through our local and global partners, we are able to assist customers in their manufacturing process to improve the ease of application of Thermal Interface Materials. This will result in better products for the end user.

LOCAL MANUFACTURING

The need for localizing the supply chain is becoming a trend across sectors. By working with Sagar Thermal Management, customers will have access to our local manufacturing capabilities that will also lead to less lead times.

TESTING & REPORTING

We will ensure all relevant industry and end-application tests for suggested materials are carried through in our labs. Relevant documentation, reports, and certifications are provided as per the customer requirements.

OVERVIEW OF PRODUCTS

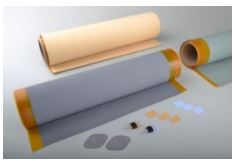
01

Thermal Grease

02

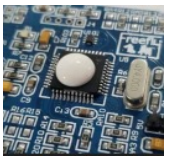
Thermal Pad

03



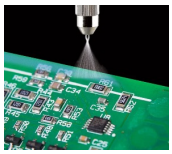
Insulation Materials

04



Thermal Gel

05

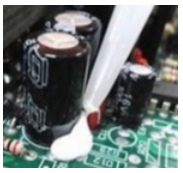


Conformal Coating

06

Potting Material

7A



Gap Filler

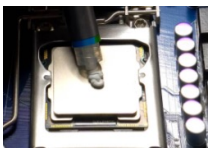
7B

TIM Putty

08

Phase change material

9A

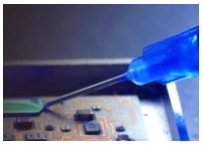


Thermal Adhesive

9B

RTV Sealant

10A



UV Adhesive

10B

Gasket Maker

11A

Heat Spreaders

11B

Fire Retardants

12A

Gaskets & Seals

12B

Specialty Graphite Gaskets

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Cold Plates

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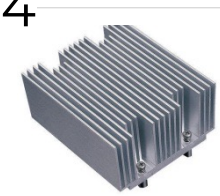

Heat Sinks, Heat Pipes & Vapor Chamber

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EMC Tape and Associated Materials

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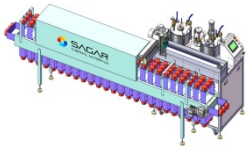


Potting Dispensing Machine

THERMAL GREASE

Sometimes called thermal paste or thermal interface material (TIM), thermal grease is a thermally conductive material used to connect a heat source to a thermal spreading device. With its profound performance and flexibility, you can find thermal grease at use in a variety of thermal settings, including heat sinks. Thermal grease improves a system's overall thermal conductivity effectiveness.

Looking for customized high-performance thermal grease? We are a leading thermal management material supplier and can quickly provide tailor-made thermal grease to meet your needs.

Features

- ✓ **Thermal Conductivity:** 1~9.5 W/m-K
- ✓ **Raw Material:** Silicone blended with thermal conductive filler
- ✓ **Temperature Range:** -50°C~230°C, Grease consistency
- ✓ High thermal conductivity
- ✓ Excellent insulation and coating properties.
- ✓ Fully Customizable as per Customer and applications

Applications

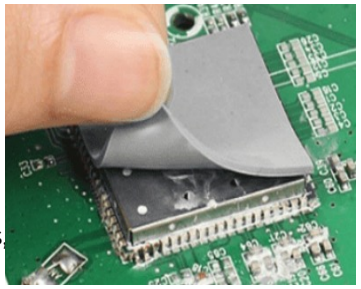
- CPU and GPUs
- Heatsinks and Cooling Solutions
- Thermal Pads Replacement

Silicone						
Part Number	TC (W/m-K)	One or Two Part	Viscosity (cps)	Density (g/cc)	Operating Temperature (°C)	Flammability rating
STTGSI100DB1	1	1	-	2.0	-40 - 150	-
STTGSI150DB1	1.5	1	-	2.2	-40 - 150	-
STTGSI200DB1	2	1	-	2.9	-40 - 150	-
STTGSI300DP1	3	1	400000	2.6	-40 - 150	UL94-V0
STTGSI350DP1	3.5	1	350000	2.6	-40 - 150	UL94-V0
STTGSI400DB1	4	1	-	3.2	-40 - 150	-
STTGSI500DP1	5	1	250000	2.4	-40 - 150	UL94-V0
STTGSI600DP1	6	1	350000	2.7	-40 - 150	UL94-V0
STTGSI800DP1	8	1	200000	5.1	-40 - 150	-
STTGSI1000DP1	10	1	260000	5.4	-40 - 150	-

Bonded Liquid Metal						
Part Number	TC (W/m-K)	One or Two Part	Viscosity (cps)	Density (g/cc)	Operating Temperature (°C)	Flammability rating
STTGBM3500DP1	35	1	100000	7.0	-40 - 225	-

THERMAL PAD

Thermal pads are a type of thermal interface material (TIM) that are used to improve the heat transfer between a heat source and a heat sink. They enhance thermal efficiency and maintain device stability even in high- temperature conditions, making them a trusted option. They are typically made of a flexible material such as silicone. We also provide thermal pads of Low Oil-Bleed and Silicon-Free nature.



In today's electronic devices, selecting the correct thermal pads is crucial for optimal performance and durability. Our high-performance thermal pads are tailored for various applications including CPUs, GPUs, laptops, EVs, and ESSes, thermal management solutions.

Features

- ✓ Good thermal conductivity: 1.0~15 W/m*K
- ✓ Added reinforcing materials: PI/glass fiber cloth/Silicone tape.
- ✓ Good aging resistance: 125°C & 1000h main performance attenuation≤10%
- ✓ Good insulating properties: ≥ 18 kV/mm
- ✓ Thickness range: 0.3~15 mm
- ✓ Hardness range: 5~80 (Shore 00)
- ✓ Fully Customizable as per Customer and applications

Applications

- **CPU**: Can be used to fill microscopic gaps between the CPU surface and heat sink.
- **GPU**: Help protect delicate GPU components through their cushioning effect.
- **Smartphones and Tablets**: Can be used to manage heat between GPUs, heat sinks, and processors to prevent overheating.

Silicone							
Part Number	TC (W/m-K)	Hardness	Appearance	Operating Temperature (°C)	Thickness (mm)	Flammability rating	Dielectric Withstand Voltage (kV)
STTPSI100DP1	1	60 (Shore A)	Grey	-60 - 180	0.229	UL94-V0	-
STTPSI100DB1	1	15 - 50 (Shore C)	Grey	-40 - 150	0.3 - 18	UL94-V0	5
STTPSI200DB1	2	20 - 50 (Shore C)	Blue	-40 - 150	0.15 - 0.18	UL94-V0	5
STTPSI300DB1	3	20 - 40 (Shore C)	Dark Gray/Blue	-40 - 150	0.3 - 12	UL94-V0	5
STTPSI400DB1	4	30 - 50 (Shore C)	Dark Gray/Blue	-40 - 150	0.3 - 5	UL94-V0	5
STTPSI500DB1	5	30 - 50 (Shore C)	Dark Grey/Pink	-40 - 150	0.3 - 5	UL94-V0	5
STTPSI600DP1	6	30 - 50 (Shore C)	Dark Grey	-40 - 150	0.5 - 5	UL94-V0	5
STTPSI700DB1	7	35 - 50 (Shore C)	Grey	-40 - 150	0.5 - 5	UL94-V0	5
STTPSI800DB1	8	35 - 50 (Shore C)	Grey	-40 - 150	0.5 - 5	UL94-V0	5
STTPSI900DB1	9	35 - 50 (Shore C)	Grey	-40 - 150	0.5 - 5	UL94-V0	5
STTPSI1000DB1	10	35 - 50 (Shore C)	Grey	-40 - 150	0.8 - 5	UL94-V0	5

THERMAL PAD

With One-Side Fiberglass							
Part Number	T.C. (W/m-K)	Hardness (Shore 00)	Appearance	Operating Temperature (°C)	Thickness (mm)	Flammability rating	Dielectric Withstand Voltage (kV)
STTPSI100DB1OF	1	30 ± 5	Blue + pink, off-white + pink	-40 - 150	0.5 - 13	UL94-V0	≥18
STTPSI200DB1OF	2	30 ± 5	Blue + pink, off-white + pink	-40 - 150	0.5 - 13	UL94-V0	≥18
STTPSI300DB1OF	3	30 ± 5	Blue + pink, off-white + pink	-40 - 150	0.5 - 13	UL94-V0	≥18
STTPSI400DB1OF	4	30 ± 5	Blue + pink, off-white + pink	-40 - 150	0.5 - 13	UL94-V0	≥18
STTPSI500DB1OF	5	30 ± 5	Blue + pink, off-white + pink	-40 - 150	0.5 - 10	UL94-V0	≥18
STTPSI600DB1OF	6	30 ± 5	Blue + pink, off-white + pink	-40 - 150	0.5 - 10	UL94-V0	≥18

With Middle Fiberglass							
Part Number	TC (W/m-K)	Hardness	Appearance	Operating Temperature (°C)	Thickness (mm)	Flammability rating	Dielectric Withstand Voltage (kV)
STTPSI100DP1FB	1.0	30 - 40 (Shore 00)	Blue	-40 - 180	0.5 - 2	UL94-V0	>10
STTPSI200DP1FB	2.0	30 - 40 (Shore 00)	Blue	-40 - 180	0.5 - 2	UL94-V0	>10
STTPSI300DP1FB	3.0	30 - 40 (Shore 00)	Blue	-40 - 180	0.5 - 2	UL94-V0	>10
STTPSI400DP1FB	4.0	30 - 40 (Shore 00)	Blue	-40 - 180	0.5 - 2	UL94-V0	>10
STTPSI500DP1FB	5.0	30 - 40 (Shore 00)	Blue	-40 - 180	0.5 - 2	UL94-V0	>10
STTPSI600DP1FB	6.0	30 - 40 (Shore 00)	Blue	-40 - 180	0.5 - 2	UL94-V0	>10

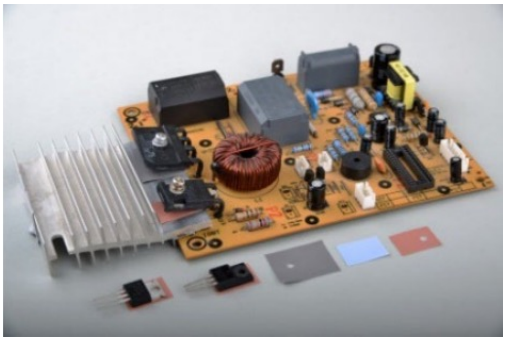
With very low rate of volatilization of siloxane							
Part Number	TC (W/m-K)	Hardness	Appearance	Operating Temperature (°C)	Thickness (mm)	Flammability rating	Dielectric Withstand Voltage (kV)
STTPSI150DB1LX	1.5	35 - 45 (Shore C)	Grey	-15 - 85	0.5 - 10	UL94-V0	10
STTPSI300DB1LX	3	35 - 45 (Shore C)	Blue	-15 - 85	0.5 - 10	UL94-V0	10
STTPSI600DB1LX	6	45 - 55 (Shore C)	Grey	-15 - 85	0.5 - 10	UL94-V0	10

INSULATION MATERIALS

Insulation Materials are easy to use, specialized Thermal Interface Materials which provide good heat dissipation and electrical insulation. We offer Silicone based Insulating thermal pads (with fiberglass/Kapton reinforcement), Polycarbonate (PC) Sheet, Polypropylene (PP) Sheet and Insulation Paper.

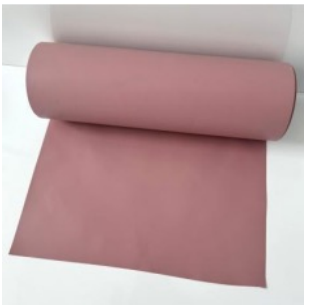
INSULATING THERMAL PAD

Insulating Thermal Pad is a silicon-based product type with excellent thermal conductivity, insulation and have convenient assembly. It is easy to use and clean, replaces thermal grease and is more durable than mica. It fills the gap of the heating interface to effectively perform heat transfer without being electrically conductive.



Features

- ✓ Soft and reinforced with Fiberglass or Kapton
- ✓ Very high Electrical Insulation
- ✓ Enhances the ability to resist puncture and tear



Applications

- Automation server
- Power Electronics
- UPS and Inverters
- Power Supplies
- MOS Tube and triode
- LED light source module

Silicone Rubber Content											
Part Number	T.C. (W/m-K)	Thickness (mm)	ρ (g/cc)	Hardness (Shore A)	Temp. Range (°C)	Elongation (%)	Tensile Strength (MPa)	Breaking Strength (N/25 mm)	Tear Strength (MPa)	Voltage Resistance (kV)	Flammability Rating
STIPSI70UT1	0.7	0.3±0.03	2.16±0.1	85±5	-50 - 200	–	–	>150	–	≥5.0	UL94-V0
STIPSI100DB1	1	0.23±0.03	1.8±0.1	85±5	-50 - 200	3 - 8	–	–	180000	≥10	UL94-V0
STIPSI100DB1T018	1	0.18±0.02	1.7±0.1	85±5	-50 - 200	5	6	–	–	≥3	UL94-V0
STIPSI100DB1T050	1	0.5±0.05	1.8±0.1	85±5	-50 - 200	3 - 8	–	–	180000	≥5	UL94-V0
STIPSI100DB1T100	1	1.0±0.03	2.0±0.1	85±5	-50 - 200	3 - 8	–	–	180000	≥10	UL94-V0
STIPSI120DB1	1.2	0.23±0.03	1.6 - 1.9	85±5	-60 - 200	3 - 8	6	–	180000	≥10	UL94-V0
STIPSI120DB1T017	1.2	0.17±0.03	1.7±0.1	85±5	-60 - 180	5	6	–		≥3	UL94-V0
STIPSI160DB1	1.6	0.23±0.03	1.8±0.1	85±5	-50 - 200	3 - 8	40	>1200	180000	≥10	UL94-V0
STIPSI160DP1	1.6	0.203	–	80	-60 - 180	2.5	20	–	–	0.5 (kVac)	UL94-V0
STIPSI200DB1	2	0.25±0.03	2.9±0.1	–	-50 - 200	–	–	>100	–	≥10	UL94-V0
STIPSI200UT1	2	0.25±0.03	2.9±0.1	80±5	-50 - 200	–	–	>100	–	≥6.0	UL94-V0

INSULATION MATERIALS

Boron Nitride Filled											
Part Number	T.C. (W/m-K)	Thickness (mm)	ρ (g/cc)	Hardness (Shore A)	Temp. Range (°C)	Thermal Impedance (cm²-°C/W)	Tensile Strength (MPa)	Breaking Strength (N/25 mm)	Tear Strength (MPa)	Voltage Resistance (kV)	Flammability Rating
STIPSI350DB1	3.5	0.25, 0.38, 0.5	1.8±0.1	90±5	-60 - 200	0.25mm: 1.36 (344.74 kPa) | 0.38mm: 1.81 - 2.45 (344.74 kPa) | 0.5mm: 2.58 - 3.23 (344.74 kPa)	6	–	<4.5 (1 MHz - 28 GHz)	>6	UL94-V0
STIPSI350UT1	3.5	0.23/0.38±0.03	1.5±0.1	90±5	-50 - 200	0.57 (0.23 mm) (275.79 kPa), 0.18 (0.38 mm) (275.79 kPa)	–	≥100	3.8 - 4.3 (1 MHz)	≥5.0	UL94-V0
STIPSI500UT1	5	0.25±0.03	1.5±0.1	90±5	-50 - 200	0.52 (0.23 mm) (275.79 kPa)	–	≥100	3.8 - 4.3 (1 MHz)	≥4.0	UL94-V0

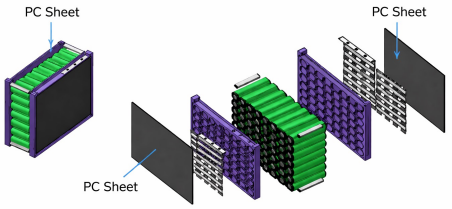
Kapton (Polyimide) Reinforced									
Part Number	T.C. (W/m-K)	Thickness (mm)	ρ (g/cc)	Hardness	Temp. Range (°C)	Thermal Impedance (cm²-°C/W)	Voltage Resistance (kV)	Volume Resistivity (Ω-cm)	Flammability Rating
STIPSI130UT1	1.3	0.15±0.02	1.4±0.2	90±5 (Shore A)	-60 - 180	1.94 (344.74 kPa)	≥8.0	≥1.00E+14	UL94-V0
STIPSI130DB1	1.3	0.15±0.02	1.8±0.1	75±5 (Shore C)	-60 - 200	1.94 (344.74 kPa)	8 kV ac	1E+14	UL94-V0
STIPSI160DB1PI	1.6	0.15±0.03	1.4±0.1	90±5 (Shore A)	-60 - 180	–	≥8	1E+14	UL94-V0

PC SHEETS

Polycarbonate (PC) sheets are transparent, thermoplastic panels made from polycarbonate resin, known for their high impact resistance, optical clarity, and thermal stability. While not as conductive as metals or specialized TIMs, they are used in applications where electrical insulation and structural support are needed alongside heat dissipation.
We offer Polycarbonate sheets in a variety of thicknesses and with and without adhesive applied.

Features

- ✓ High Impact Resistance
- ✓ High Operating temperature range
- ✓ Can provide UV Resistance
- ✓ Electrical Insulation
- ✓ Lightweight
- ✓ Optical Clarity
- ✓ Can provide Flame Retardancy



Applications

- Act as Thermal Insulation Barriers
- Used for electrically insulating thermal spacers
- Provide structural support to heat spreaders (metal inserts or graphite layers)
- Act as Transparent protective cover

INSULATION MATERIALS

Part Number	Thickness (mm)	ρ (g/cc)	Tensile Strength (MPa)	Elongation at Break (%)	Tear Strength (g/mil)	Vicat Softening Temp (°C)	Thermal Shrinkage (%) (135°C)	Volume Resistivity (Ω/cm)	Colour
STCNPC0XC1T013	Without Adhesive: 0.125 Thickness of Adhesive Layer: 0.1	1.21	52	100	>30	135	≤1.0	>1.00E+16	Milk White, Transparent, Black
STCNPC0XC1T018	Without Adhesive: 0.175 Thickness of Adhesive Layer: 0.1	1.22	52	100	>30	135	≤1.0	>1.00E+16	Milk White, Transparent, Black
STCNPC0XC1T025	Without Adhesive: 0.25 Thickness of Adhesive Layer: 0.1	1.22	52	100	>30	135	≤1.0	>1.00E+16	Milk White, Transparent, Black
STCNPC0XC1T038	Without Adhesive: 0.38 Thickness of Adhesive Layer: 0.1	1.22	52	100	>30	135	≤1.0	>1.00E+16	Milk White, Transparent, Black
STCNPC0XC1T043	Without Adhesive: 0.43 Thickness of Adhesive Layer: 0.1	1.22	52	100	>30	135	≤1.0	>1.00E+16	Milk White, Transparent, Black
STCNPC0XC1T050	Without Adhesive: 0.5 Thickness of Adhesive Layer: 0.1	1.22	52	100	>30	135	≤1.0	>1.00E+16	Milk White, Transparent, Black
STCNPC0XC1T076	Without Adhesive: 0.76 Thickness of Adhesive Layer: 0.1	1.22	52	100	>30	135	≤1.0	>1.00E+16	Milk White, Transparent, Black

Available thickness (mm) – 0.1, 0.125, 0.175, 0.25, 0.38, 0.43, 0.5, 0.76, 1.0, 1.2, 1.5, 2.0

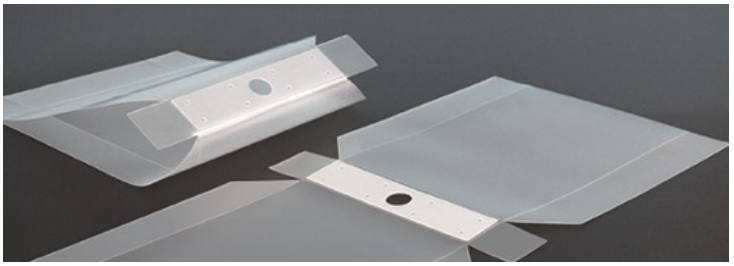
PP SHEETS

Polypropylene (PP) sheets are a versatile and durable plastic sheeting. They are known for their excellent chemical resistance, low moisture absorption, and high fatigue strength, they are a lightweight yet tough material. The primary role of the sheet is to displace the air trapped between the two uneven surfaces, which in turn improves the heat transfer efficiency.

In particular, we offer PP sheets (with or without adhesive applied), with Flame Retardant properties, Anti-static properties and specializing for Lithium Battery applications; in addition to the general PP Sheets.

Features

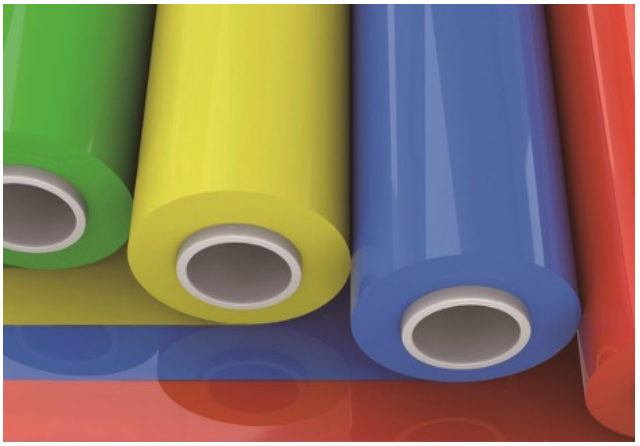
- ✓ Excellent electrical insulation
- ✓ Very conformable
- ✓ Chemically resistant, Mechanically robust, easy to handle
- ✓ RoHS, REACH Complaint
- ✓ Compliant with Ion Pollution standards



INSULATION MATERIALS

Applications

- Automotive Batteries
- Industrial ESS Batteries
- Batteries for Consumer Electronics
- Casing for consumer appliances
- Chemical resistant barriers
- For domestic applications
- Electromagnetic shields and gaskets
- Used in optical manufacturing industry



PP Sheet for Lithium Battery Applications				
Part Number	Thickness (mm)	ρ (g/cc)	Ra Value	Colour and Texture
STPIPP0XC1T005	0.05	0.91	0.20 – 1.00	Natural Colour & Dull/Mirror like appearance and texture
STPIPP0XC1T010	0.10	0.91	0.20 – 1.00	Natural Colour & Dull/Mirror like appearance and texture
STPIPP0XC1T050	0.50	0.91	0.20 – 1.00	Natural Colour & Dull/Mirror like appearance and texture
STPIPP0XC1T100	1.00	0.91	0.20 – 1.00	Natural Colour & Dull/Mirror like appearance and texture
STPIPP0XC1T150	1.50	0.91	0.20 – 1.00	Natural Colour & Dull/Mirror like appearance and texture

PP Flame Retardant Sheets				
Part Number	Thickness (mm)	ρ (g/cc)	Flammability Rating	Colour and Texture
STPRPP0XC1T008	0.08	0.91	UL94 VTM-0	Black/White Fine matt/dull like appearance and texture
STPRPP0XC1T025	0.25	0.91	UL94 VTM-0	Black/White Fine matt/dull like appearance and texture
STPRPP0XC1T050	0.50	0.91	UL94 V-0	Black/White Fine matt/dull like appearance and texture
STPRPP0XC1T100	1.00	0.91	UL94 V-0	Black/White Fine matt/dull like appearance and texture
STPRPP0XC1T150	1.50	0.91	UL94 V-0	Black/White Fine matt/dull like appearance and texture

PP Sheet for Anti-Static Applications				
Part Number	Thickness (mm)	ρ (g/cc)	Antistatic Value (Ω)	Colour and Texture
STPSPP0XC1T010	0.10	0.91	10^{9}	White/Natural Colour & Double Matt/Double Rough
STPSPP0XC1T025	0.25	0.91	10^{12}	White/Natural Colour & Double Matt/Double Rough
STPSPP0XC1T050	0.50	0.91	10^{16}	White/Natural Colour & Double Matt/Double Rough
STPSPP0XC1T070	0.70	0.91	10^{17}	White/Natural Colour & Double Matt/Double Rough
STPSPP0XC1T100	1.00	0.91	10^{18}	White/Natural Colour & Double Matt/Double Rough

INSULATION MATERIALS

PP Color Film Sheets			
Part Number	Thickness (mm)	ρ (g/cc)	Colour and Texture
STPOPP0XC1T008	0.08	0.91	Black/White/Grey/Red/Blue/Green/Pink/Yellow/Orange Colour Dull/Rubber/Orange Peel texture
STPOPP0XC1T025	0.25	0.91	Black/White/Grey/Red/Blue/Green/Pink/Yellow/Orange Colour Dull/Rubber/Orange Peel texture
STPOPP0XC1T050	0.50	0.91	Black/White/Grey/Red/Blue/Green/Pink/Yellow/Orange Colour Dull/Rubber/Orange Peel texture
STPOPP0XC1T100	1.00	0.91	Black/White/Grey/Red/Blue/Green/Pink/Yellow/Orange Colour Dull/Rubber/Orange Peel texture
STPOPP0XC1T150	1.50	0.91	Black/White/Grey/Red/Blue/Green/Pink/Yellow/Orange Colour Dull/Rubber/Orange Peel texture

INSULATION PAPER

Insulation Paper is an electrically insulating sheet which boasts of good strength, resistance to oil, water and chemicals, and insulation properties. It is easy and convenient to use.

Features

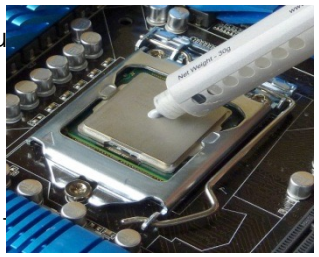
- ✓ Good insulation
- ✓ Corrosion resistance
- ✓ Tear and abrasion resistance
- ✓ Good mechanical toughness
- ✓ Flexible
- ✓ Good wear and aging resistance
- ✓ Easy to peel and stick

Applications

- Used as electrical insulation in heavy machinery and appliances
- Used as a honeycomb core material (structural reinforcement)
- Used as fire barriers and thermal barriers
- Used as an acoustic barrier

Part Number	Thickness (mm)	Longitudinal Elongation (%)	Lateral Elongation Rate (%)	Thermostability (°C)	Dielectric Strength (kV/mm)	Bonding Strength (MPa)
STIS0AE1	0.25	≥8	≥2	≥135	≥2.5	≥0.14

THERMAL GEL



Thermal gels are one/two component products, available as cure-in-place or pre-cu solutions. Thermal gel materials can be reworkable after application and their flow flow characteristics can be customized for various application requirements. These thermal products are suitable for automation and mass production.

Looking for a custom solution of thermal conductive gel? We are one of the top -rated and leading suppliers of thermal management materials and can tailor high- thermal conductive gel to meet your needs.

Features

- ✓ **Type**: Single-component / Two-component
- ✓ **Thermal Conductivity:** 1.5~9 W/m*K
- ✓ **Hardness:** 5~80 (Shore 00)
- ✓ **Insulating Properties:** ≥ 8 kV/mm
- ✓ **Aging Resistance:** Excellent performance with ≤ 10% attenuation at 125℃ & 1000h
- ✓ Fully Customizable as per Customer and applications

Applications

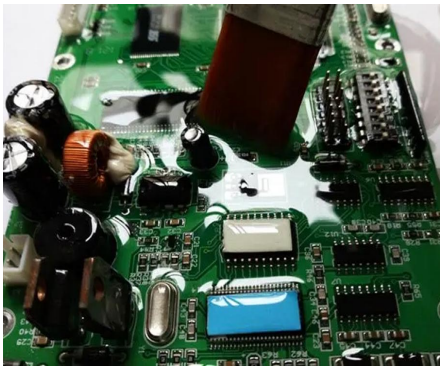
- LEDs
- Audio Amplifiers
- Automotive
- PSU (Power Supply Units)

Part Number	Series	TC (W/m-K)	No of Parts	Density (g/cc)	Viscosity (cps)		Hardness	Operating Temp. (°C)	Flammability rating	Breakdown Voltage (kV/mm)
					Part A	Part B				
STGLSI100DB2	Silicone	1	2	2.5	280000	300000	45 (Shore 00)	-40 - 200	UL94-V0	7
STGLSI120DB2	Silicone	1.2	2	2.5	120000	120000	45 (Shore 00)	-40 - 200	UL94-V0	7
STGLSI150DB2	Silicone	1.5	2	2.6	300000	300000	60 (Shore 00)	-40 - 200	UL94-V0	8
STGLSI200DB2	Silicone	2	2	2.8	350000	350000	50 (Shore 00)	-40 - 200	UL94-V0	8
STGLSI300DB2	Silicone	3	2	3.0	400000	600000	50 (Shore 00)	-40 - 200	UL94-V0	8
STGLSI500DB1	Silicone	5	1	3.3	-	-	-	-40 – 150	UL94-V0	≥5
STGLSI600DB2	Silicone	6	2	3.4	600000	550000	60 (Shore00)	-40 - 200	UL94-V0	10

CONFORMAL COATING

Conformal coating is a protective, breathable coating of thin polymeric film applied to printed circuit boards. Conformal coatings are typically applied with a thickness of 25–250 µm to the electronic circuitry to protect against moisture and other potentially damaging conditions.

Seeking customized high-performance conductive materials? As a premier supplier of thermal management solutions, we specialize in adapting conductive materials to your specific requirements swiftly. Whether you need enhanced conductivity for electronic components or optimized heat transfer for industrial applications, our expertise ensures tailored solutions to meet your exacting needs.



Features

- ✓ Excellent electrical insulation
- ✓ Acts as a protective moisture barrier
- ✓ Provides good mechanical strength
- ✓ Enhanced chemical resistance
- ✓ Fully Customizable as per Customer and applications

Applications

- Automotive Electronics
- Aerospace and Defense
- Medical and Industrial equipment

Acrylic								
Part Number	Viscosity (cps)	ρ (g/cc)	Tackfree Time (Min.)	CT @ RT (in h)	Operating Temperature (°C)	Appearance	Volume Resistivity (Ω-cm)	Dielectric Strength (kV/mm)
STCCAC0JX1A3	25	0.91±0.03	5 – 7	24 (23°C)	-40 – 130	Transparent	3×10^14	15
STCCAC0JX1A6	60	0.93±0.03	≤60	≤16 (23°C)	-40 – 130	Transparent	3×10^14	15
STCCAC0JX1M5	20 – 40	0.8 – 1	10 – 15	24 (23°C)	-65 – 125	Transparent	3×10^14	80

UV Curable				
Part Number	Viscosity (s)	Density (g/mm³)	Appearance	Special Properties
STCCEP30JX1LV	190±60	1.10±0.05	Pale Yellow Liquid	UV Curable, High temperature resistance, Outstanding Arc Resistance

Epoxy				
Part Number	Viscosity (s)	CT (in h)	Appearance	Special Properties
STCCEP30JX1	60 – 100	24 (23°C)	Available in various Colours	Water-proof, Dust-proof, Shock-proof, Outstanding Arc Resistance
STCCEP30JX1HV	70 – 100	60 (80°C)	Available in various Colours	High temperature resistance, Outstanding Arc Resistance
STCCEP30JX1LV	20 – 40	60 (80°C)	Available in various Colours	Excellent Arc Resistance, Dust-proof

POTTING MATERIAL

In electronics manufacturing and assembly, potting materials are compounds that can fill and seal cavities in electronic assemblies. By doing so, potting compounds protect components from vibration and shock.

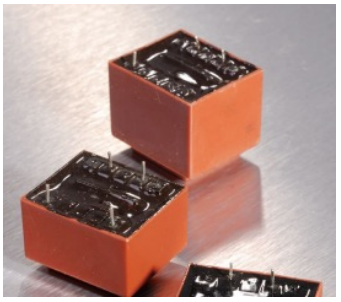
Thermal conductive potting glue is a compound offering excellent thermal conductivity and versatile properties such as insulation, flame retardancy, sealing, waterproofing, dustproofing, and shock proofing. Formulated as a two-component adhesive, it cures at room temperature, transitioning from a liquid to a polymer elastomer. It exhibits resilience even at high temperatures.

Features

- ✓ **Excellent thermal conductivity, insulation, and flowability**
- ✓ **Thermal conductivity:** 0.4~4 W/m*K
- ✓ **Hardness:** 10~80 (Shore A)
- ✓ **Insulation:** ≥ 8 kV/mm
- ✓ **Aging resistance:** At 125°C for 1000 hours, main performance degradation ≤10%
- ✓ Fully Customizable as per Customer and applications

Applications

- Electronic Assemblies
- Sensors
- Connectors and Terminals
- Circuit Boards



Epoxy									
Part Number	TC (W/m-K)	No of Parts	Mixed Viscosity (mPas)	Mixing Ratio	Hardness (Shore D)	Gel Time (min)	Operating Temperature °C	Curing Time (hrs)	Flammability rating
STPMEP65SM2TK	0.6-0.7	2	1000 ± 500	100:90	90±5	7 – 15 (130 °C)	-40 – 160	3 (105°C)	UL94-V0
STPMEP80SM2BSP	0.8	2	20000 ± 10000	9:1	80	40(25 °C)	-40 – 150	12 – 24 (25°C)	UL94-V0
STPMEP100SM2IT	1.0	2	20000±5000	9:1	70±10	80 (25 °C)	-40 – 160	1 (80°C)	UL94-V0
STPMEP120SM2IT	1.1 ± 0.1	2	1500 - 2000	100:11	85±10	60 - 90 (60 °C)	-40 – 150	36 - 48 (25°C)	UL94-V0

POTTING MATERIAL

Silicone									
Part Number	TC (W/m-K)	No of Parts	Mixed Viscosity (mPa.s)	Mixing Ratio (by weight)	Hardness	Application / Operating Temperature	Curing time @ RT (Hrs)	CT@ Higher Temp. (min)	Flammability rating
STPMSI60DP2	0.5 – 0.7	2	1800	1:1	5 (Shore C)	-50 – 150	4 (25°C)	10 (150°C)	UL94-V0
STPMSI100DP2	1.0±0.1	2	2800 - 3800	1:1	45 (Shore A)	-50 – 150	4 - 6 (25°C)	10 (100°C)	UL94-V0
STPMSI150DP2	1.5	2	3200	1:1	45 (Shore A)	-50 – 150	<24 (25°C)	10 (100°C)	UL94-V0
STPMSI200DP2	2.0	2	7500	1:1	45 (Shore A)	-50 – 150	<24 (25°C)	10 (100°C)	UL94-V0
STPMSI300DP2	3.0	2	15000	1:1	45 (Shore A)	-50 – 150	1.5 (25°C)	10 (100°C)	UL94-V0
STPMSI400DP2	4.0	2	22000	1:1	65 (Shore C)	-50 – 150	4 (25°C)	10 (100°C)	UL94-V0

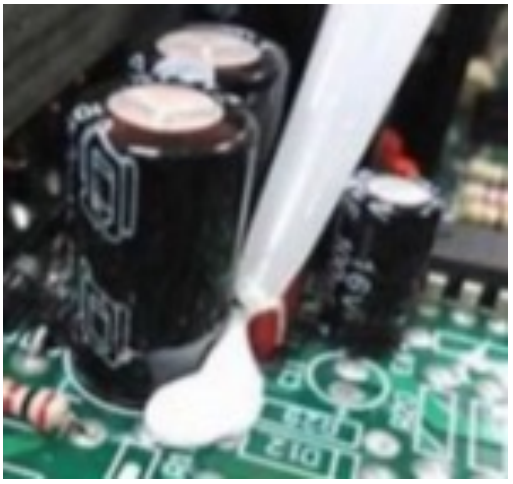
PU									
Part Number	TC (W/m-K)	No of Parts	Mixed Viscosity (mPa.s)	Mixing Ratio (by weight)	Hardness	Operating Temperature (°C)	Curing time @ RT (Hrs)	CT@ Higher Temp. (min)	Flammability rating
STPMPU65SM2FH	0.6 - 0.7	2	2100±250	100:15	75±5 (Shore A)	-40 – 130	24 (25°C)	120 (60°C)	UL94-V0
STPMPU90SM2AM	0.9	2	3000±1000	100:20	65±10 (Shore A)	-40 – 120	72 (25°C)	120 (60°C)	UL94-V0
STPMPU70SM2MV	0.7	2	2000±500	100:20	70±5 (Shore D)	-40 – 150	24-48 (25°C)	180 (80°C)	UL94-V0
STPMPU200JX2	2	2	11000	100:25:00	90 (Shore A)	130°C	12 (23°C)	60 (80°C)	UL94-V0

GAP FILLER

Gap fillers are an important component in thermal management for electronic devices. A class of thermal interface materials (TIMs), gap fillers are specifically designed to fill small or large gaps between heat-generating and heat-dissipating surfaces. Eliminating these gaps helps improve heat transfer and prevent overheating that can otherwise damage components and negatively impact performance.

Thermal gap fillers are developed in laboratories and applied within electronic devices and systems to fill minute spaces and crevices between heated components and chassis or heat sink assemblies. These spaces hinder heat transfer due to air's poor thermal conductivity. Gap filler formulations offer a solution by leveraging their superior thermal conductivity, effectively replacing the air-filled interface. This enables efficient heat transfer from sensitive components, ensuring devices remain compliant and operate within recommended temperature limits.

Features



- ✓ High Thermal Conductivity
- ✓ Conformability to Irregular Surfaces
- ✓ Durability Under Temperature and Pressure Variations
- ✓ Electrical Insulation
- ✓ Non-Toxic and Environmentally Friendly
- ✓ Fully Customizable as per Customer and applications

Applications

- Electronics
- Automotive
- Aerospace
- Tele communications

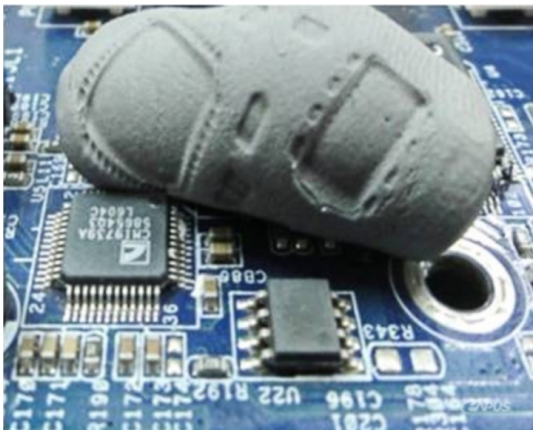
Part Number	Series	TC (W/ m-K)	No of Parts	Viscosity of Part A (cps)	Viscosity of Part B (cps)	Mixing Ratio	Density (g/cc)	Hardness	Operating Temperature (°C)	CT@ 25°C (Hours)	Appearance	Flammability rating
STGFSI200DP2LD	Silicone	2.0	2	160	130	1:1	1.8	-	-50 - 150	24	A: Pink / B: White	UL94-V0
STGFSI350DP2	Silicone	3.5	2	280000	260000	1:1	3.2	50 (Shore 00)	-50 - 150	24	A: Pink / B: White	UL94-V0
STGFSI400DP2	Silicone	4	2	300000	260000	1:1	3.3	50 (Shore 00)	-40 - 200	24	A: Red / B: White	UL94-V0
STGFSI400DP1	Silicone	4	1	270000	-		3	45 (Shore 00)	-50 - 200	24	Yellow	UL94-V0
STGFSI500DP1	Silicone	5	1	250000	-		3.2	50 (Shore 00)	-50 - 200	24	Blue	UL94-V0
STGFSI500DP2	Silicone	5	2	280000	280000	1:1	3.3	60 (Shore 00)	-50 - 200	24	Green	UL94-V0

TIM PUTTY

Thermal Interface Material (TIM) Putty is a one-part high-performance dispensable gap filler. It has the general characteristics of good thermal conductivity (T.C.), low thermal resistance, good adherence to heat dissipation components, permanent non drying, good insulation, and unlimited compression. It has excellent tolerance compensation feature which can overcome overflow and dryness related issues. Finally, it must be noted that there are two broad varieties based on the underlying chemistry: the ones which are silicone based (made of silica gel as the matrix and filled with a variety of high-performance ceramic powders) and the ones which are Silicon-Free. Both feel like plasticine to touch.

Features

- ✓ Designed to remove manufacturing tolerances
- ✓ Does not stress delicate components
- ✓ No Vertical flow
- ✓ No issue of sedimentation
- ✓ Radiation resistance and superior dielectric properties
- ✓ Excellent chemical and mechanical stability
- ✓ Shelf Life of ~60 Months



Applications

- Network Communication Equipment
- Consumer Electronics
- Industrial Electronic Products and Lighting
- Between a component and heat sink

Part Number	Chem.	TC (W/m-K)	η (cps)	ρ (g/cc)	Temp. Range (°C)	Colour	BLT (mm)	V.R. (Ω-cm)	Breakdown Voltage (kV/mm)	Flow Rate (g/min)	Dissipation Factor (1 kHz)
STPTSI350LY1HV	Silicone	3.5	2000000	3	-60 – 180	Blue	0.1 – 1.5	>10^15	12	31	–
STPTSI350LY1HV	Silicone	3.5	15000000	3	-60 – 180	Blue	0.1 – 3.0	>10^15	12	–	–
STPTSI600LY1LV	Silicone	6.0	3500000	3.3	-60 – 180	Blue	0.1 – 1.5	>10^15	12	21	–
STPTSI600LY1HV	Silicone	6.0	15000000	3.3	-60 – 180	Blue	0.1 – 3.0	>10^15	12	–	–
STPTSI800LY1	Silicone	8.0	17000000	3.4	-60 – 180	Gray	0.1 – 3.0	>10^15	12	32	–
STPTSI1000LY1	Silicone	10.0	20000000	3.3	-60 – 180	Blue	0.2 – 3.0	>10^15	12	23	–
STPTSI1300LY1	Silicone	13	20000000	3.3	-60 – 180	Gray	0.2 – 3.0	>10^15	12	17	–
STPTSF350TT1	Silicone-Free	3.5	7000000	2.5	-55 – 200	White	–	>10^13	14	–	0.005
STPTSF450TT1	Silicone-Free	4.5	4400000	2.3	-55 – 200	Gray	–	>10^9	3	–	0.005
STPTSF510TT1	Silicone-Free	5.1	4250000	3	-55 – 200	Gray	–	>10^9	3.2	–	0.005
STPTSF610TT1	Silicone-Free	6.1	4500000	3	-55 – 200	White	–	>10^14	12	–	–

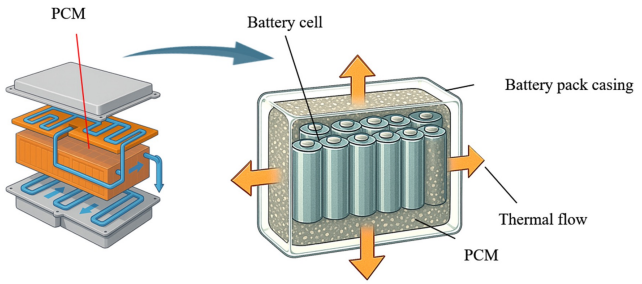
PHASE CHANGE MATERIAL

A phase-change material (PCM) is a substance which releases/absorbs sufficient energy at phase transition to provide useful heat or cooling. Generally, the transition will be from one of the first two fundamental states of matter - solid and liquid - to the other.

Silicon-free thermal conductive phase change materials feature a matrix of reinforced, toughened, and modified phase change materials, combined with fillers of varying sizes and shapes with high thermal conductivity. Specialized surface treatments enhance filler compatibility. These materials remain solid at room temperature but transition into highly viscous pastes at phase transition temperatures, improving heat transfer efficiency by reducing thermal resistance through close adherence to heating element surfaces.

Features

- ✓ High thermal conductivity
- ✓ Low thermal impedance
- ✓ Thermal phase change material
- ✓ Good compressibility
- ✓ Good wettability
- ✓ Good reliability
- ✓ Fully Customizable as per Customer and applications



Applications

- Thermal energy Storage
- Cold Energy battery
- Waste heat recovery
- Thermal comfort in vehicles

Part Number	TC (W/m-K)	Density (g/cc)	Operating Temperature (°C)	Phase Change Temperature (°C)	Thickness (mm)	Special Properties	Appearance
STPC250DB1	2.5	2.6	-20 - 120	50 - 60	0.13 - 5	Absorbs heat and softens micro flow, and recovers its solid shape after cooling, Low volatility - less than 1%	Grey
STPC300DB1	3	2.8	-20 - 120	50 - 60	0.13 - 5	With excellent wettability and compressibility, it can be cut into various sizes, Tightly fitting irregular device surfaces	Grey
STPC500DB1	5	3	-20 - 120	50 - 60	0.13 - 5	Low volatility - less than 1%	Grey
STPC600DB1	6	3.2	-20 - 120	50 - 60	0.13 - 5	With excellent wettability and compressibility, it can be cut into various sizes, Low volatility - less than 1%	Grey
STPC800DB1	8	3.5	-20 - 120	50 - 60	0.13 - 5	Absorbs heat and softens micro flow, and recovers its solid shape after cooling, Tightly fitting irregular device surfaces	Grey

PHASE CHANGE MATERIAL

Our joint venture with LHS unites two leaders in thermal innovation to build a world-class thermal materials company. Backed by over six years of proven success and technology deployed in more than one million batteries, this partnership is grounded in real-world performance. By combining LHS's proven PCM expertise with Sagar's advanced materials engineering and scalable manufacturing, we are setting new benchmarks in battery safety, performance, and reliability for next-generation EVs—redefining thermal standards, strengthening India's clean mobility ecosystem, and accelerating the future of electric mobility at scale.

Fill & Flow Material

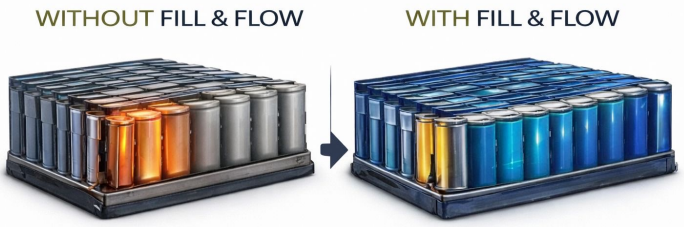
The LHS Fill & Flow (F&F) material is a phase change material (PCM) designed for passive thermal management in battery packs and enclosed electronic systems. It works by absorbing, storing, and dissipating heat, helping maintain more uniform and lower cell temperatures—improving battery life, safety, and overall performance. The material is supplied as a solid and must be melted before use, allowing it to flow and fully encapsulate cells and components, ensuring complete surface contact within the pack. It is nonflammable, compatible with many engineering polymers (with testing recommended), and optimized for scalable manufacturing using standard hot-melt dispensing systems. Overall, it enables reliable, homogeneous thermal control in EV batteries and energy systems.

Applications

- Thermal energy Storage
- Cold Energy battery
- Waste heat recovery
- Thermal comfort in vehicles

Features

- ✓ High thermal conductivity
- ✓ Low thermal impedance
- ✓ Thermal phase change material
- ✓ Good compressibility
- ✓ Good wettability
- ✓ Good reliability
- ✓ Fully Customizable as per Customer and applications

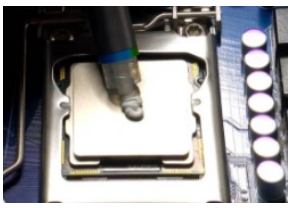


Part Number	Phase Change Temperature (°C)	Specific Gravity	Operating Temperature (°C)	Viscosity Above PTT (CPS)	Latent Heat	Appearance
F&F 91	49 - 51	0.8	-10 – 120	25 – 100	200 – 220 kJ/kg	White Flake
F&F 92	43 - 57	0.8	-10 – 120	25 – 100	200 – 220 kJ/kg	White Flake
F&F 91FR	48 - 53	1.15	-10 – 120	25 – 100	>160 kJ/kg	White Flake

ADHESIVES - THERMAL ADHESIVE

Thermally conductive adhesives are unique bonding materials designed to remove heat efficiently. These materials effectively bond things together while also allowing heat to transfer quickly. Their unique composition makes them essential for quick heat dissipation. We have Thermal Adhesives in many chemistries such as PU, Silicone, Epoxy, and others. They are commonly used across industries like automotive and electronics where heat removal is crucial.

Thermally conductive adhesives efficiently bond components while rapidly transferring heat, crucial for industries like automotive and electronics.



Features

- ✓ Wide Bonding Range
- ✓ High Strength And Toughness
- ✓ High Thermal Conductivity
- ✓ Excellent Electrical Insulation
- ✓ Fully Customizable as per Customer and applications

Applications

- Thermal adhesive is a type of thermally conductive glue used for electronic components and heat sinks.

Silicone								
Part Number	TC (W/m-K)	No of Parts	Density (g/cc)	Hardness	Operating Temperature (°C)	Breakdown Voltage	Appearance	Flammability rating
STTASI100UT1	1.0	1	1.82±0.1	70±10 (Shore A)	-60 – 200	≥15	White Paste	UL94-V0
STTASI200RA1WH	1.6 – 2.0	1	2.00	60 – 80 (Shore A)	-60 - 260	-	White/Gray	UL94-V0
STTASI200UT1	2.0	1	2.70±0.1	78±10 (Shore A)	-60 – 200	≥15	White Paste	UL94-V0
STTASI300UT1	3.0	1	3.00±0.1	80±10 (Shore A)	-60 – 200	≥15	White Paste	UL94-V0

RTV SEALANT

RTV sealant stands for "Room Temperature Vulcanizing" sealant. It's a type of silicone-based sealant that cures at room temperature when exposed to air. RTV sealants are popular because they're versatile, flexible, and resistant to water, heat, and various chemicals. They're commonly used for sealing and bonding in automotive, construction, and industrial applications.

Features

- ✓ Curing Mechanism
- ✓ Flexibility
- ✓ Adhesion
- ✓ Temperature resistance
- ✓ Electrical Insulation
- ✓ Durability
- ✓ Fully Customizable as per Customer and applications

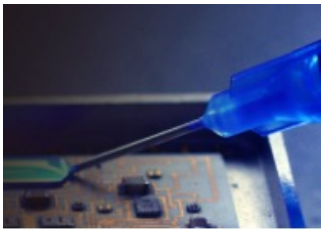
Applications

- Automotive
- Electrical
- Plumbing
- Aerospace
- Marine

Part Number	Series	TC (W/m-K)	No of Parts	Density (g/cc)	Hardness	Operating Temperature (°C)	Surface Drying Time	Tensile Strength (MPa)	Appearance
STRTSI30RA1	Silicone	0.3	1	1 - 1.4	20 - 40 (Shore A)	-60 - 210	20 - 40 Minutes	1.5	Black Deoxime Glue
STRTSI200RA1	Silicone	2	1	1 - 1.4	20 - 40 (Shore A)	-60 - 210	35 Minutes	1.8	White and Black
STRTSI80RA1	Silicone	0.8	1	1.3 - 1.7	30 - 50 (Shore A)	-60 - 260	20 - 40 Minutes	1	White
STRTSI110RA1	Silicone	1.1	1	1.3 - 1.7	30 - 50 (Shore A)	-60 - 260	20 - 40 Minutes	1	White
STRTSI180RA1	Silicone	1.8	1	1.3 - 1.7	30 - 50 (Shore A)	-60 - 260	5 - 30 Minutes	0.8	Grey
STRTSI30RA1	Silicone	0.3	1	1 - 1.4	20 - 40 (Shore A)	-60 - 210	20 - 40 Minutes	1.5	Black Deoxime Glue

UV ADHESIVE

UV adhesive, or ultraviolet adhesive, is a type of adhesive that cures or hardens when exposed to ultraviolet light. This type of adhesive is used in various applications due to its fast-curing times and strong bonding properties



Features

- ✓ Fast Curing
- ✓ Strong Bond
- ✓ Clear finish
- ✓ Fully Customizable as per Customer and applications

Applications

- Electronics
- Glass
- Medical Devices

Part Number	Series	No of Parts	Viscosity (cps)	Specific Gravity (g/cc)	Hardness	Operating Temperature (°C)	Curing time@ RT	Tensile Strength	Appearance
STUAAC0SO1	Acrylic	1	3000	1.0-1.06	85 (Shore D)	-40 - 120	2min	2180 (psi)	Transparent Liquid
STUAAC31JX1	Acrylic	1	7000 - 10000	1.02-1.08	75 - 85 (Shore D)	-40 - 120	5s	16	Transparent Liquides are Fluorescent, Semi-Transparent
STUAAC0AN1	Acrylic	1	40000 - 60000	1.08	30 - 50 (Shore A)	-40 - 120	5 - 20s	-	Transparent/Blue

GASKET MAKER

Gasket maker is a type of sealant designed to create a seal between two surfaces, usually to prevent leaks of fluids or gases. It's often used in automotive and industrial applications where traditional gaskets might not be suitable or available.

Features

- ✓ Chemical Resistance
- ✓ Adjustable curing time
- ✓ Flexibility and Elasticity
- ✓ Color and Visibility
- ✓ Cures via dealcoholizing (moisture curing)
- ✓ Fully Customizable as per Customer and applications

Applications

- Automotive
- Plumbing
- Marine
- Aerospace
- Electrical

Part No.	T.C. (W/m-K)	ρ (g/cc)	Hardness (Shore A)	Temp. Range (°C)	Tackfree Time (Minutes) (25°C, 60% RH)	Curing Speed (mm/24h)	Tensile Strength (MPa)	Shear Strength (MPa)	Elongation (%)	Volume Resistance (Ω.cm)
STGMSI0AH1	-	1.35 ± 0.05	38±3	-50 - 200	5 - 20	0.43 - 0.71	2.5	-	≥600	3.41E+14
STGMSI0RA1GY	-	1.2 - 1.4	30 - 60	-60 - 260	20 - 40	2 - 3	2.3	≥1.5	660	≥1.0E+15
STGMSI200RA1WH	2	1.3 - 2.7	30 - 80	-60 - 260	≤10	3	≥1.5	0.8	≥100	1.2E+12

SPECIALITY GRAPHITE HEAT SPREADER

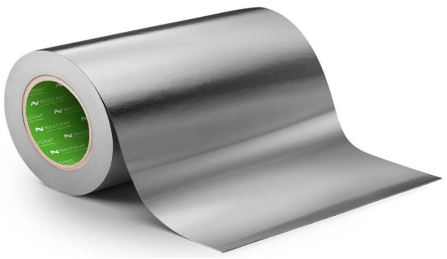
Heat spreaders are components designed to distribute heat more evenly across a surface or within a device. They are commonly used in electronics, automotive applications, and other fields where managing heat is critical.

Features

- ✓ High Thermal Conductivity
- ✓ Light Weight
- ✓ Thermal Stability
- ✓ Electrical Conductivity
- ✓ Fully Customizable as per Customer and applications

Applications

- Electronics
- LED Lighting
- Automotive
- Aerospace
- Power Devices



CHARACTERISTICS	SS350	SS400	SS500	SS550	SS600
Typical Thermal Conductivity In-Plane - Through-Plane (W/m-K)	350 - 4.1	400 - 3.7	500 - 2.8	550 - 3.7	600 - 3.5
Thickness Capability Range(mm)	0.94 / 0.127	0.94 / 0.060	0.40 / 0.076	0.127	0.127
Typical Roll Thickness (mm) . Typical Roll Width (mm) (Width of graphite material only, finished roll width will slightly decrease with coating and adhesive options)	0.94 • 610 0.48 • 610 0.20 • 610	0.94 • 610 0.51 • 584 0.25 • 584 0.127 • 610 0.060 • 400	0.40 • 406 0.20 • 457 0.127 • 440 0.076 • 400	0.127 • 406	0.127 • 182
Thermal Contact Impedance Per Side (°C sqcm/W) @ specified thickness (mm)	0.34 @ 0.51	0.38 @ 0.51	0.90 @ 0.102	0.44 @ 0.102	0,44 @ 0.102
Tensile Strength (MPa)	-	9.7	7.7	9.7	9.7
Electrical Resistivity In-Plane (Ohm)	5.8	5.2	4.2	3.4	4.4
Electrical Conductivity In-Plane. Through-Plane (S/cm)	1,750. 23	1,900. 18	2,400. 15	2,900. 10	2,900. 10
Coefficient of Thermal Expansion(ppm/°C) In-Plane Through-Plane	-0,4 27.0				
Specific Heat (J/g-°C) @ 50°C	0,81				
Operating Temperature (°C)	-40 to +400				
UL Flammability Rating	94V-0				
RoHS Compliant	Yes				
Lead / Halogen Free	Yes				

FIRE RETARDANTS

Fire retardants are substances or materials that are added to products to inhibit or delay the spread of fire. They are crucial in enhancing the fire safety of various materials used in construction, textiles, electronics, and more.

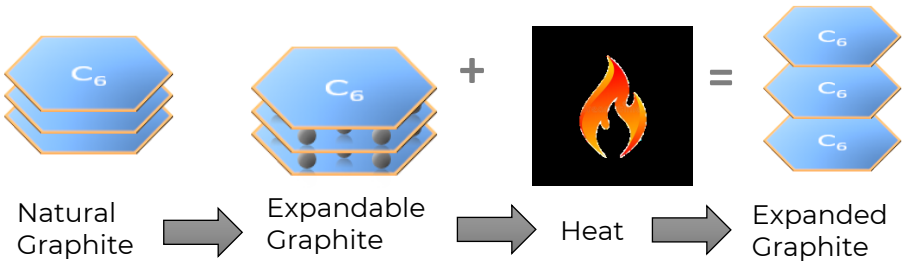
Features

- ✓ Chemical Composition
- ✓ Thermal Stability
- ✓ Compatibility
- ✓ Cost Effectiveness
- ✓ Compliance with Standards
- ✓ Fully Customizable as per Customer and applications

Applications

- Electronics
- Construction
- Textiles
- Transportation

Expandable Graphite



- ✓ Non-halogenated
- ✓ Non-toxic
- ✓ Will not burn at any temperature
- ✓ Protects substrate from heat and oxygen
- ✓ Reduces smoke evolution

Expansion Comparison of Common Grades

GG 180-60N	GG 160-50N	GG 200-100N	GG 220-50N	GG 160-80N	GG 220-80N	GG 250-50N

5g of Graphite is expanded in a cylinder with the same weight applied to the top. The differing heights of the cylinders is due to the different pressures generated by the flake's expansion.

GASKETS & SEALS

Gaskets and seals are components that are designed to prevent liquid, dust, debris, air, gas, EMI, light, chemicals or other items from entering or exiting a device. They are designed to all the space between two imperfect mating surfaces, with the gasket or sealing material accommodating surface irregularities.

A gasket or seal is generally made from a semi-resilient, conformable material that can have a number of highly specialized customizations optimized for the end product application. Material selection and gasket design rely on environmental conditions, compressive forces, mating surface finishes, material compatibility and temperature variations.

Features

- ✓ Tensile Strength
- ✓ Fire Resistant
- ✓ Vibration Damping
- ✓ Environmental Resistance
- ✓ Thermal Conductivity
- ✓ Durability
- ✓ Electrical Conductivity
- ✓ Lightweight
- ✓ Fully Customizable as per Customer and applications

Applications

- ✓ Electronic device housing vents
- ✓ Foam air & Fluid Filters
- ✓ Cabinet & control panel door gasket
- ✓ Airflow management & Filtration
- ✓ Dust & water proofing
- ✓ Thermal transfer gap pads
- ✓ Shock & vibration absorption
- ✓ Rubber, neoprene, foam, EPDM gaskets
- ✓ Vibration management
- ✓ Weather & dust proofing, weather stripping
- ✓ Moisture indicators

SPECIALTY GRAPHITE GASKETS

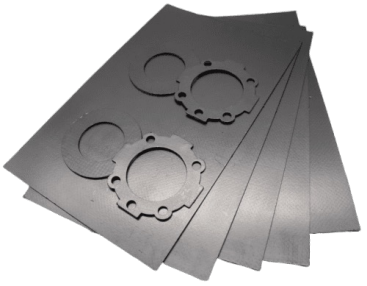
Specialty graphite gaskets are used in a variety of industrial applications due to their excellent sealing properties, high-temperature resistance, and chemical stability.

Features

- ✓ High Temperature Resistance
- ✓ Chemical Resistance
- ✓ Self-Lubricating Properties
- ✓ Flexibility and Conformability
- ✓ Fully Customizable as per Customer and applications

Applications

- Marine Applications
- HVAC Systems
- Pharmaceuticals
- Power Generation



GRADE DESIGNATION	TYPICAL SIZES	DESCRIPTION	TYPICAL APPLICATIONS
Premium nuclear grade /Standard industrial grade	0.005" (0.127 mm) to 0.060" (1.5 mm) Thick 24" (610 mm), 39.4" (1.0 m), 60" (1524 mm) Width 100' (30.48 m) Long, Tol: ±0.002" (0.05 mm) Thickness ±1/16" (1.6 mm) Width + 2.0' (610 mm)/-0 (0.0 mm) Length	Premium nuclear grade/Standard industrial grade monolithic sheet. Contains a nonmetallic, inorganic passivating inhibitor to increase the resistance to corrosion and oxidation.	Used as facing material to make high-purity laminated gaskets, nuclear form-in-place gaskets and thread sealant tape Nuclear, fossil fuel, aerospace and electronic applications. Used as filler material for spiral wound gaskets Chemical, petro chemical, refinery, and metallurgical applications
Premium nuclear grade with inhibitor/Standard industrial grade with inhibitor	0.005" (0.127 mm) to 0.030" (0.762 mm) Thick 24" (610 mm), 39.4" (1.0 m), 60" (1524 mm) Width 100' (30.48 m) Long Tol: ±0.002 (0.05 mm) Thickness ± 1/16" (1.6 mm) Width + 2.0' (610 mm)/-0 (0.0 mm) Length	Contains a nonmetallic, inorganic passivating inhibitor to increase the resistance to corrosion and oxidation.	Primarily used for nuclear packing and gasketing and in industrial packing and gasketing applications . Used as base grade material for braided flexible graphite and as filler in spiral wound gaskets. Chemical, petrochemical, refinery, and metallurgical applications.
Adhesive backed sheets	0.005" (0.127 mm), 0.010" (0.254 mm), 0.015" (0.381 mm), 0.020" (0.508 mm), 0.025" (0.635 mm), 0.030" (0.762 mm) Thick 24" (610 mm) & 39.4" (1.0 m) Wide Can also be slit to width with minimum quantity equal to parent roll width. 100'(30.48 m) Length	Plain or crinkled adhesive-backed GTA & GTB grade sheet containing less than 50 ppm leachable chlorides. Bonded to a 0.0015" (0.0381 mm) thick polymer with pressure sensitive adhesive using a siliconized release paper on one side.	Can be used in applications requiring up to two layers of thickness . Use flat tape for straight runs or as pipe thread sealant and the crinkle for the curved lay.

COLD PLATES

Cold plates are thermal management devices designed to dissipate heat from electronic components, helping to maintain optimal operating temperatures. They are commonly used in applications where efficient heat removal is crucial, such as in computers, power electronics, and industrial machinery.

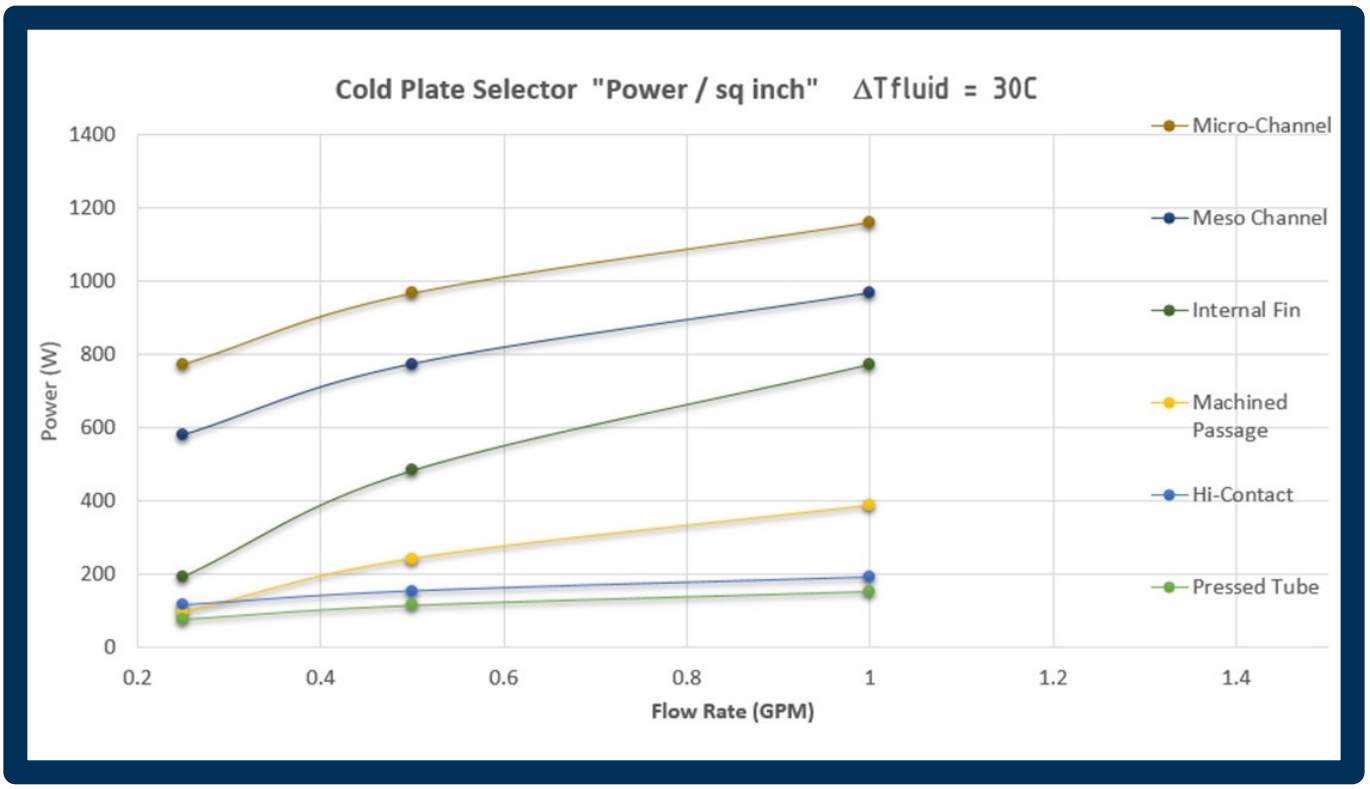
Features

- ✓ High Thermal Conductivity
- ✓ Corrosion Resistance
- ✓ Cooling Mechanism
- ✓ High heat Transfer Coefficient
- ✓ Sealing and Durability
- ✓ Fully Customizable as per Customer and applications

Applications

- Electronics
- Automotive
- Aerospace
- Industrial Equipment

Cold Plates Selector



HEAT SINKS, HEAT PIPES & VAPOR CHAMBERS

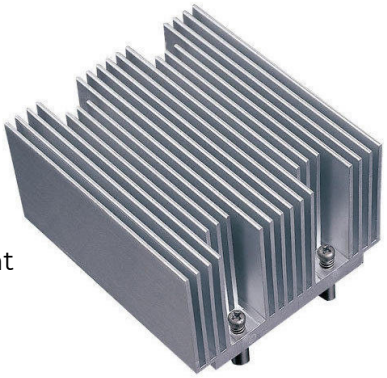
A heat sink is a passive thermal management component designed to dissipate heat from electronic devices and systems, ensuring that they operate within safe temperature ranges. By increasing the surface area available for heat dissipation, heat sinks help prevent overheating and improve the reliability and performance of electronic components.

Features

- ✓ High Thermal Conductivity
- ✓ Corrosion Resistance
- ✓ Compact Design
- ✓ Low Thermal Resistance
- ✓ Fully Customizable as per Customer and applications

Applications

- Electronics
- Automotive
- Aerospace
- Industrial Equipment



Heat Pipes

Heat pipes are highly efficient thermal management devices that transfer heat using the phase change of a working fluid. They consist of a sealed pipe containing a small amount of liquid. When one end is heated, the liquid vaporizes, absorbing heat and moving to the cooler end. There, it condenses back into a liquid, releasing the heat. This cycle allows for effective heat transfer with minimal temperature difference.

Features

- ✓ High Efficiency
- ✓ Orientation Independence
- ✓ Design Variations
- ✓ Fully Customizable as per Customer and applications

Applications

- HVAC system
- Solar Thermal systems
- Automotive

Vapor Chambers

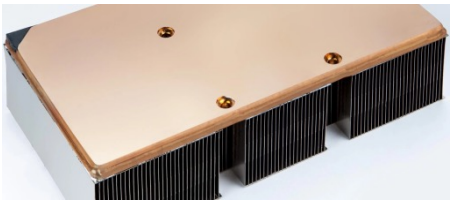
Vapor chambers are advanced thermal management devices similar to heat pipes but designed to distribute heat more evenly across a surface. They operate on the same principle of phase change of a working fluid, typically in a flat, planar format.

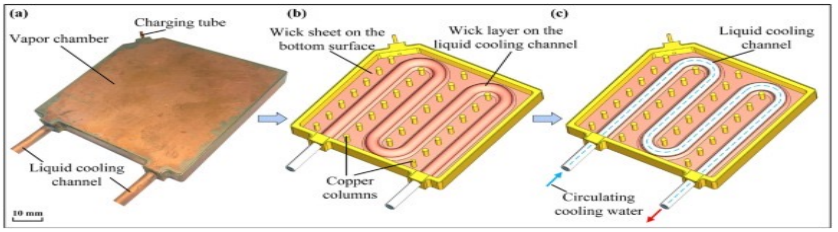
Features

- ✓ High Efficiency
- ✓ Uniform Heat Spreading
- ✓ Low Profile
- ✓ Fully Customizable as per Customer and applications

Applications

- Electronics Cooling
- LED Lighting
- Renewable Energy





EMC TAPE

EMC tape is a polyester fiber cloth, which has been pre-treated and coated with metal through chemical plating and electroplating processes. The shielding layer is made of conductive metal cloth, which is treated with sizing and coated with black coating on the surface. It is coated with acrylic conductive pressure-sensitive adhesive through a special process to provide an electromagnetic shielding solution.

Features

- ✓ Excellent softness, wearability, and formability
- ✓ Low impedance, with good electromagnetic wave shielding performance and conductive grounding performance
- ✓ Has good bonding strength and can quickly establish bonding strength for different metal materials
- ✓ Good die-cutting performance

Applications

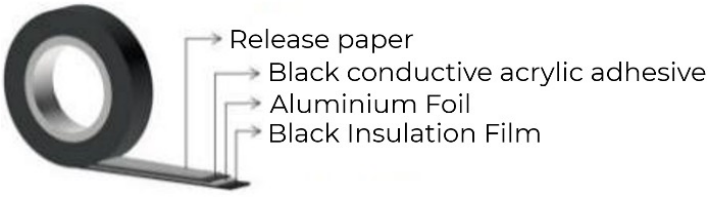
- It is used in electronic components for high thermal dissipation and selective electrical conduction
- This product is widely used as an internal structural component in electronic products such as mobile phones, tablets and laptops.
- It provides electromagnetic wave shielding and electrostatic discharge of modules such as speakers, loudspeakers, antennas, cameras, etc.

Part Number	Weaving Density (T)	Thickness (mm)	Shielding Effectiveness (dB) (10 MHz – 3 GHz)	Holding Power (Hours)	Surface Resistance (Ω/inch²)	Z-On Resistance (Ω/□)
STCTPO0SZ1	260±10	0.13±0.02	≥60	≥48	≤0.07	≤0.2
STCTPO0XY1	–	0.11±0.02	≥70	≥24	≤0.05	≤0.05

BLACK CARBON SINGLE CONDUCTIVE ALUMINUM FOIL TAPE

Black carbon single conductive aluminum foil tape is a special electromagnetic shielding Aluminum foil, which provides electrostatic discharge, electromagnetic shielding, heat conduction, heat dissipation, shading and, inlay, etc. It consists of an Aluminum foil with acrylic adhesive applied on one side and a black insulation paper applied on the other side.

Features



- ✓ Electromagnetic shielding
- ✓ Heat conduction

Applications

- It is used in electronic components for high thermal dissipation and selective electrical conduction
- It is used for electromagnetic shielding in consumer electronics

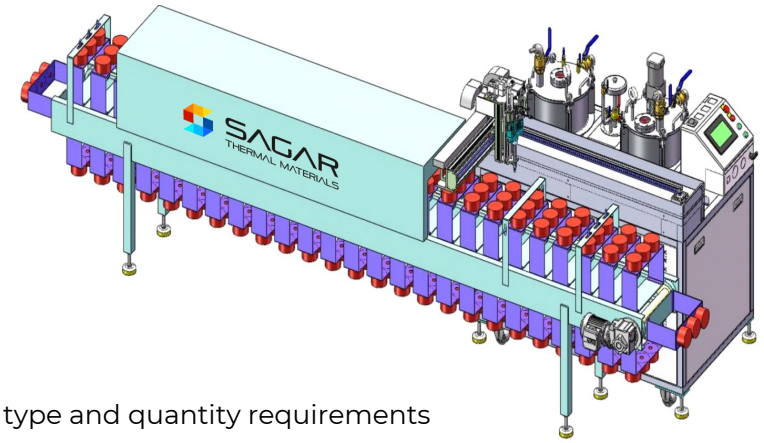
Part Number	Operating Temp. (°C)	Thickness (mm)	Shielding Effectiveness (dB) (30 MHz – 10 GHz)	Holding Power (Hours)	Surface Resistance (Ω/inch²)	Adhesive Resistance (Ω/□)
STATAL0DD1	-20 – 120	0.05 – 0.1	≥65	≥48	≤0.05	≤0.1
STATAL0SS1	Upto 120	0.05	≥40	≥48	≤0.05	≤0.1

POTTING DISPENSING EQUIPMENT

While our high-quality Thermal Interface Materials are engineered for superior heat dissipation, their efficacy depends on precise, consistent application. To ensure flawless results, we also supply state-of-the-art dispensing machines, designed to handle a wide range of potting materials with accuracy and repeatability, and tailormade to customer's standards.

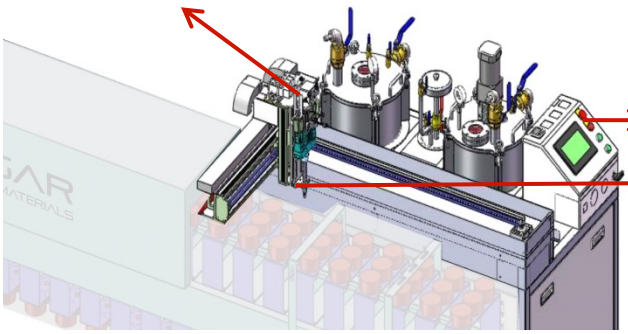
POTTING DISPENSING SOLUTION WITH CONVEYOR & OVEN CURING SYSTEM

Features of the Dispenser

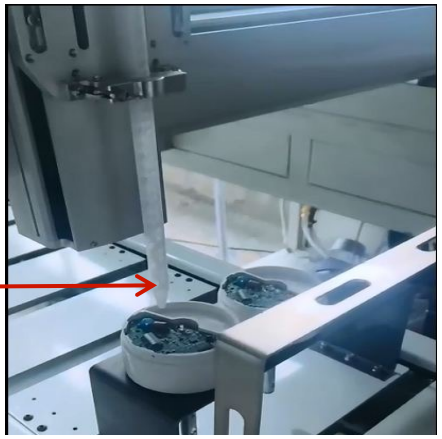


- ✓ A fully automated dispensing system designed to complete potting in 36s per part
- ✓ Equipped with programmable controllers for precise dispensing control
- ✓ Ensures uniform potting quality, reducing human errors
- ✓ Allows for adjustment based on material type and quantity requirements
- ✓ Improves production efficiency with consistent and repeatable results
- ✓ The mixing of the potting material is done automatically

3 axis(x, y, z)
Dispensing system

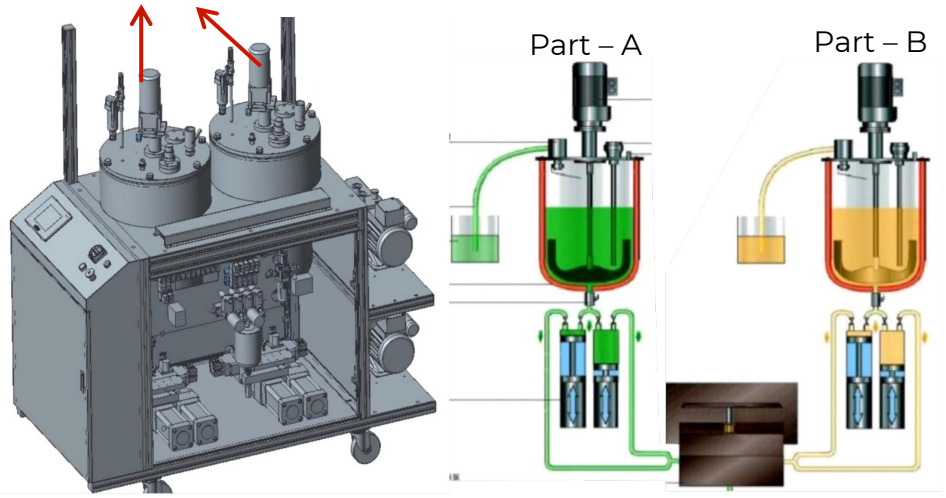


Programmable
control panel



3 axis(x, y, z) Dispensing system

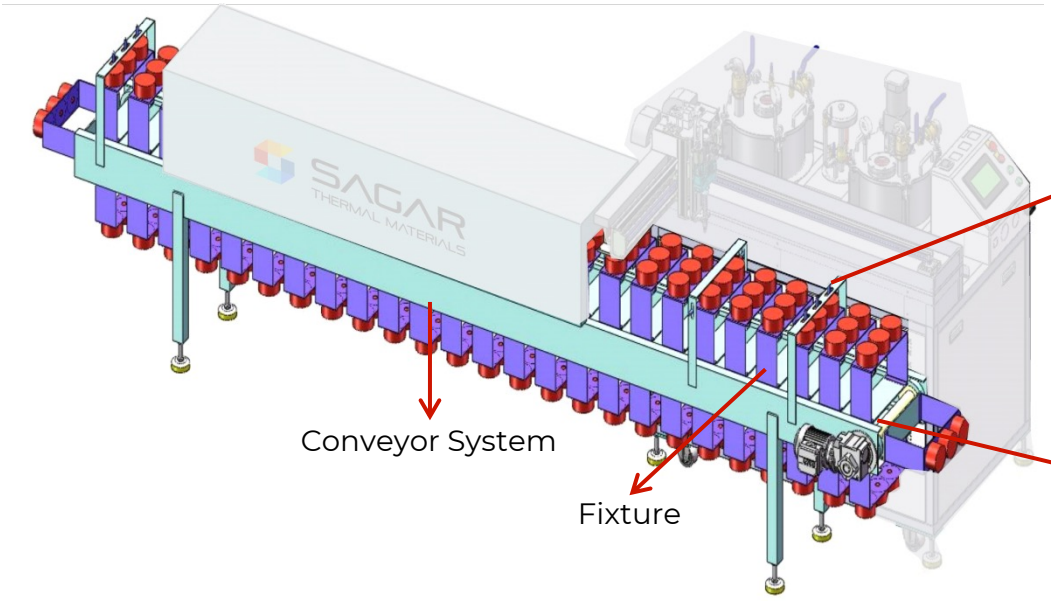
Glue barrels



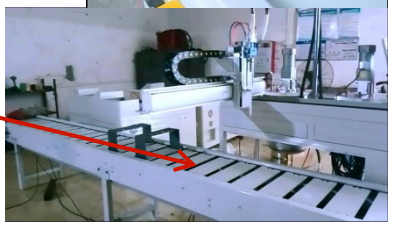
POTTING DISPENSING EQUIPMENT

Features of the Conveyor System

- ✓ Designed to carry parts from potting to curing in a continuous flow
- ✓ Speed-adjustable using a controller to match process requirements
- ✓ Capacity to hold the required number of parts simultaneously
- ✓ Integrated sensors detect un potted or missing parts, ensuring quality
- ✓ Provides smooth, reliable, and automated transfer between processes
- ✓ The belt is automatically driven; after dispensing a single product, the belt automatically transports it to the next product



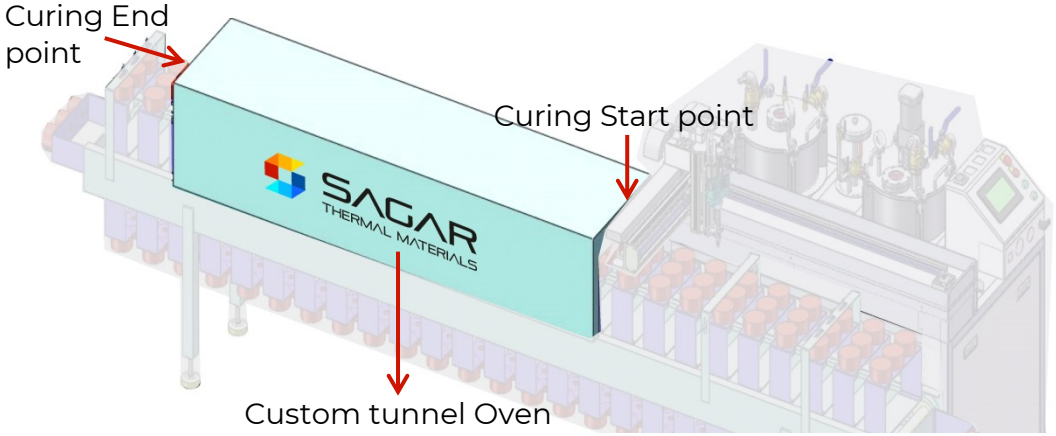
Sensors



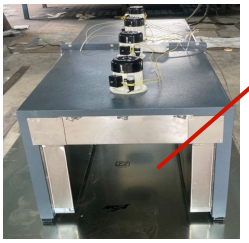
Conveyor Line

Features of the Oven Curing Setup

- ✓ A custom tunnel oven designed for curing while parts move through it
- ✓ Handles 50 – 60 parts simultaneously, ensuring high output
- ✓ Maintains controlled temperature for consistent curing results
- ✓ Ensures that within 10 – 12 minutes, each part is fully cured when reaching the other end
- ✓ Built with energy-efficient heating and safety systems for reliable operations



Thermal image of Potted parts curing at 60°C inside the oven

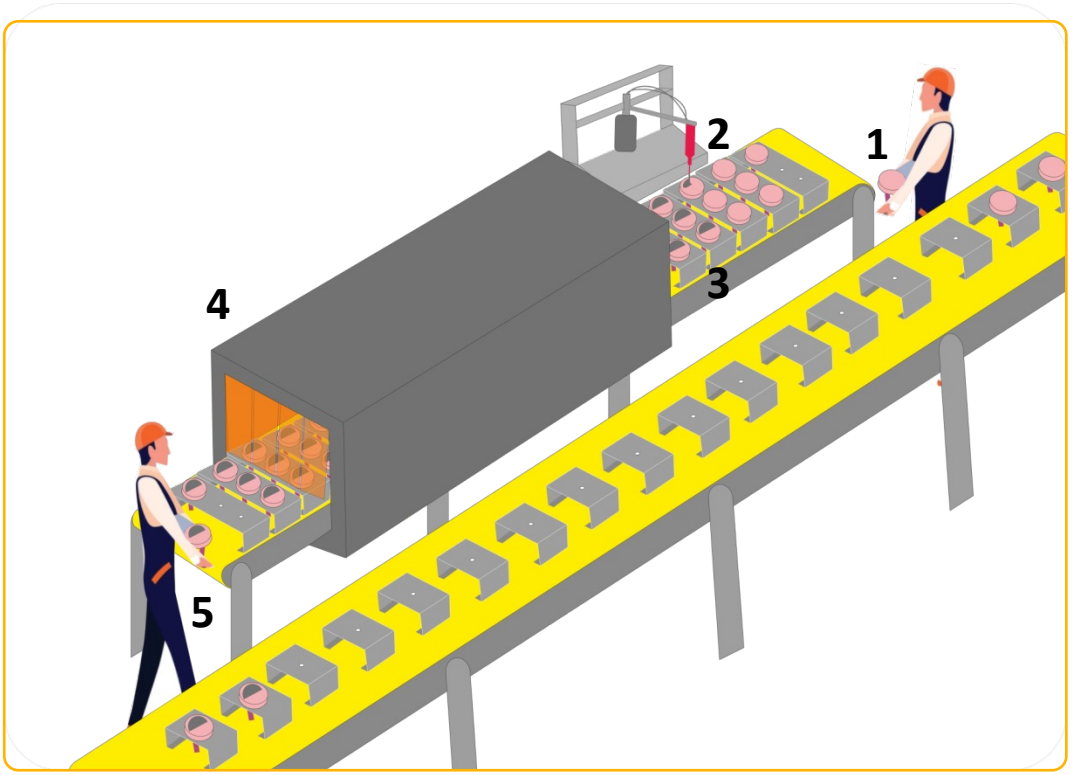


Custom tunnel Oven

POTTING DISPENSING EQUIPMENT

Process Flow

1. Part Loading: Components are placed on fixtures
2. Automatic Potting: Dispensing machine performs potting in 30 to 40 seconds per part
3. Conveyor Transfer: Potted parts move towards oven via conveyor
4. Oven Curing: Parts cure in the oven within 10–12 minutes while moving continuously
5. Finished Output: Fully cured parts are ready for the next stage of production



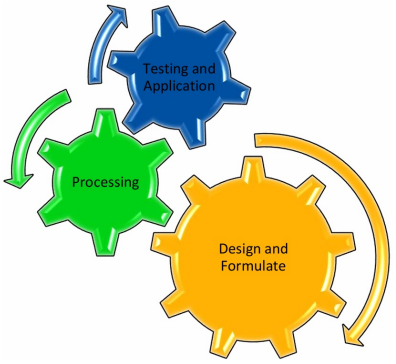
R&D, MANUFACTURING FACILITY

Location: Bollaram Industrial Area, Hyderabad.

Sagar Thermal Materials operates a well-equipped R&D facility and advanced manufacturing unit dedicated to the development and production of high-performance thermal management materials. Our facility combines strong research capabilities with efficient production infrastructure to support both innovation and large-scale manufacturing.

With a daily production capacity of nearly 8 tons and a storage capacity of approximately 100 tons, we ensure consistent supply and operational reliability for our customers. Our integrated setup enables us to develop, test, and manufacture advanced thermal interface materials including potting compounds, coatings, and adhesives.

Through continuous research and process optimization, we deliver reliable thermal management solutions for industries such as electronics, EVs, batteries, semiconductors, and LED applications.

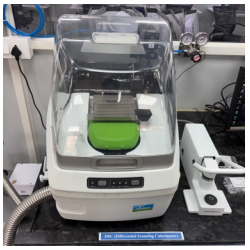


Testing Machine

THERMAL CONDUCTIVITY TEST MACHINE

BREAKDOWN VOLTAGE MACHINE

UNIVERSAL TESTING MACHINE (UTM)

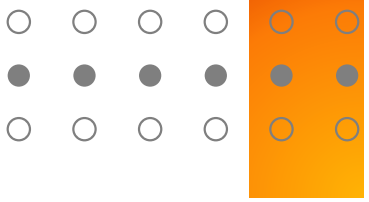


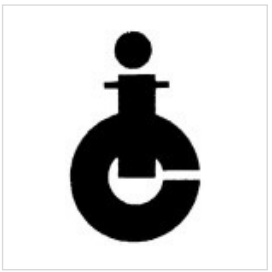
DIFFERENTIAL SCANNING CALORIMETER (DSC)

KARL FISCHER TITRATOR

Production Unit

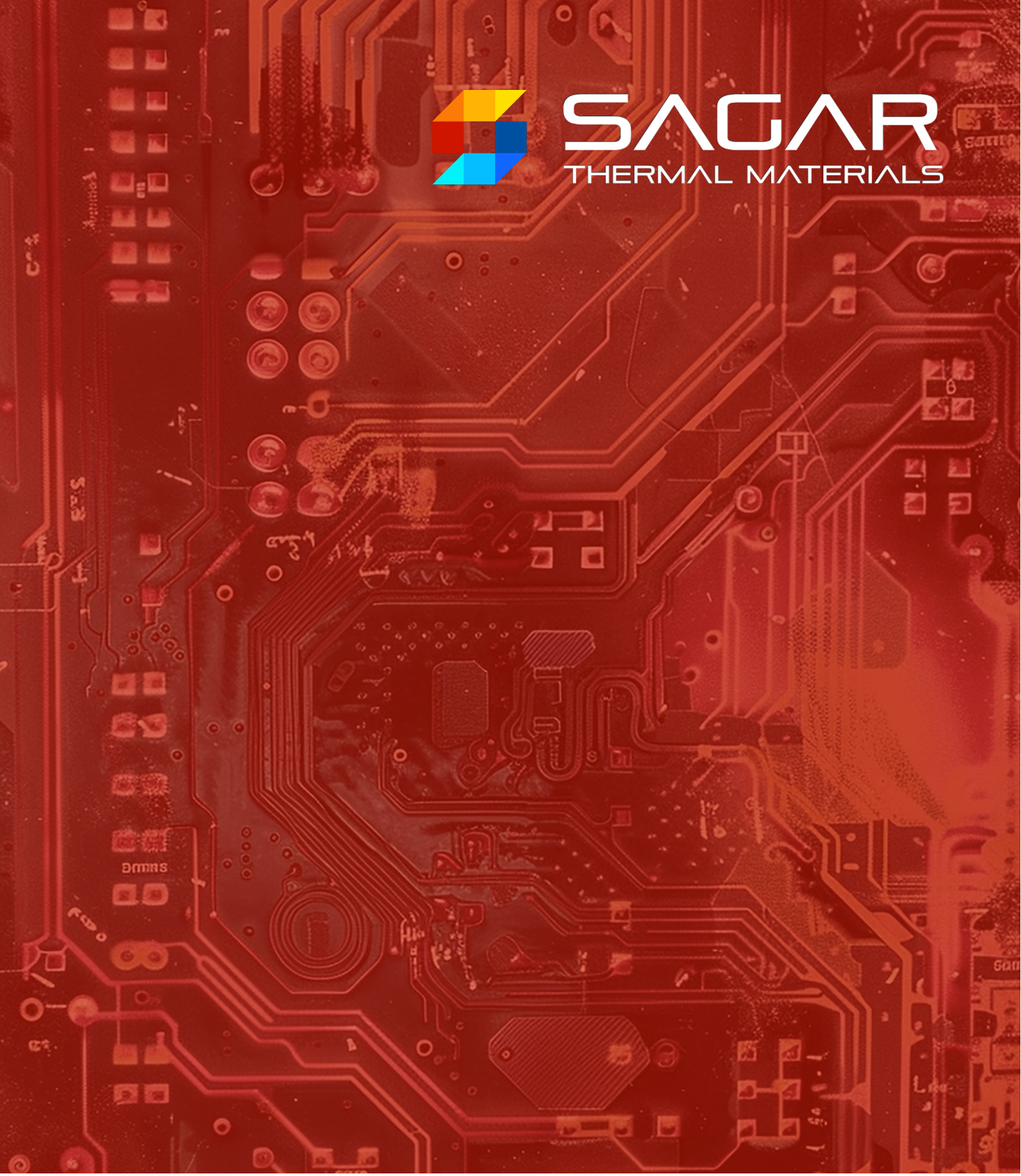
SAGAR THERMAL CUSTOMERS





INDUSTRIAL APPLICATIONS

1. Thermally conductive graphite sheet
2. Seat foam
3. Thermally conductive potting material
4. Conformal coating
5. ON/OFF and level switch
6. HIPS plastic sheet
7. Aluminum round coin
8 . Fasteners
9. Thermoelectric cooler
10. Thermally conductive adhesive
11. Aluminum heat sink
12. 12V Fan
13. Plastic cabinet box
14. Hot air exhaust pipe
15. Seat base plastic part



MARCH
2026

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