

Technical Data Sheet

8420 Thermal White – Thermal Interface Material

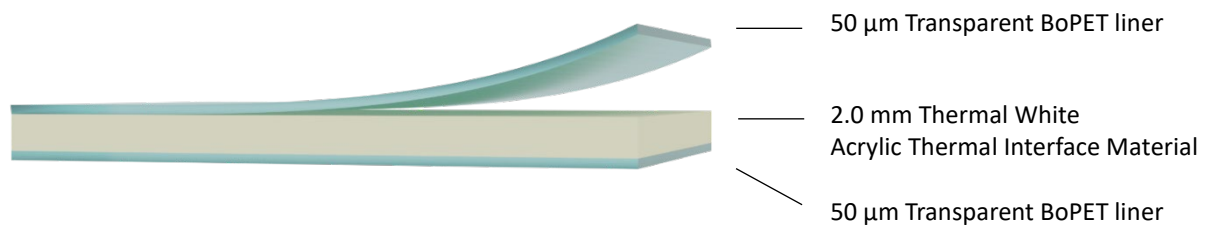
Product Description

CCL Olympic 8420TW is a tacky and very soft, acrylic, Thermal Interface Material with a thermal conductivity of 2.0 W/m·K. This product is based CCL's latest PURE™ technology which encompasses a group of new plasticizer free and durable acrylic polymers. Together with its tacky surface and intrinsic softness, the 8420TW is ideal gap-filler material suitable for many applications.

Product Features

- 2.0 mm thick
- Thermal conductivity of 2.0 W/m·K
- Low compression force
- Intrinsic adhesion
- Electric Insulator
- Ideal as gap-filler material
- Non-silicone base

Product Construction



Technical Information Note: The technical data below cannot be used for specification purposes but should be considered representative or typical only.

Available sizes

| Property | Value | Additional information |
|---------------------|----------------------|------------------------|
| Standard dimensions | 700mm x 500mm sheets | |

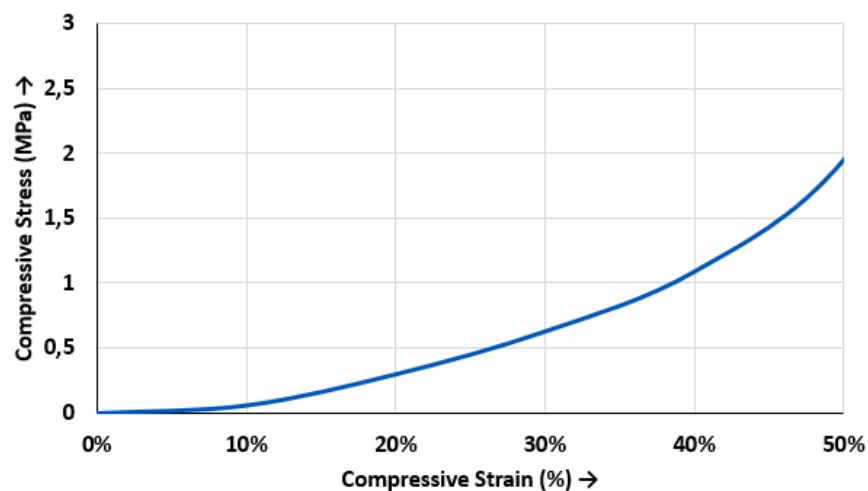
Typical Product Properties & Test Conditions

| Property | Value | Method | Additional information |
|----------------------|-------------------------|-----------------|------------------------|
| Total tape thickness | 2.0 mm. | ASTM D3652 | |
| Thickness tolerance | 10% | | |
| Density | 1.9 g/cm ³ | Internal method | |
| Adhesive type | Very Soft Acrylic | | |
| Carrier | No carrier | | |
| Color | Thermal White | | |
| Top liner | 50 µm Transparent BoPET | | |
| Bottom liner | 50 µm Transparent BoPET | | |

Typical Performance Characteristics

| Property | Value | Method | Additional information |
|--------------------------------|-----------|-----------------|------------------------|
| Thermal conductivity | 2.0 W/m·K | ASTM D5470 | |
| Flammability | UL94 V-0 | UL94 | |
| DC Breakdown Voltage | 30 kVDC | IEC 60243-2 | |
| Shore Hardness OO | 40 | ASTM D2240 | (30 seconds delay) |
| Comparative Tracking Index | ≥600 V | IEC 60112 | |
| Minimum long term temperature | - 40 °C | Internal Method | |
| Maximum short term temperature | 230 °C | Internal Method | |
| Maximum long term temperature | 150 °C | Internal Method | |

CCL Olympic 8400TW – Compressive Stress vs. Strain



Specimen diameter: 30 mm
Specimen thickness: 3 mm
Strain rate: 12 mm/min
Preload: 1 N

Product Applications

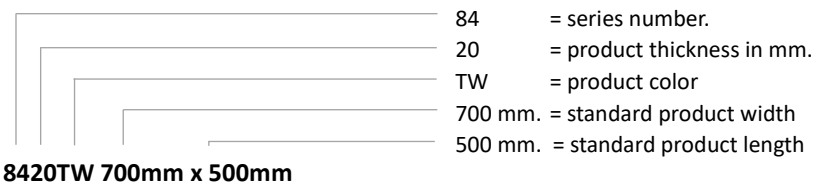
8420TW is designed for applications in the electronic industry, including:

- LED assembly
- PCB assembly
- Mounting heat sinks and heat spreaders
- Battery pack assembly

Product code structure

The structure of our product code is as follows:

For example 8420TW:



Custom Solutions

We can modify all our adhesive and mechanical properties for various solutions, such as peel, adhesion, shear, softness, impact resistance, tack, color, rigidity, flexibility, temperature resistance and even smell to create the solution that meets your exact specifications.

Additional Product Information

| | |
|---------------------------------|---|
| Product Application | The application surface should be clean and dry. In order to optimize performance, surface temperatures should be around room temperature. |
| Storage Conditions & Shelf Life | 8420TW Olympic tapes must be stored between 10°C to 30°C, and 0-95% relative humidity. The optimum storage conditions are 22°C and 50% relative humidity and in original sealed packaging. If stored under recommended conditions, then this material will retain its specified performance criteria for 2 years. Performance of tapes is not projected to change even after shelf life expires, but it is recommended that the tapes be used within two years. |
| Conflict Minerals | Conflict Minerals refers to illegal mining of minerals or other derivatives (Tin, Tantalum, Tungsten and Gold) mined in the provinces of the DRC (Democratic Republic of Congo). CCL-Olympic does not use Tin, Tantalum, Tungsten or Gold, or any derivative thereof, for the production of any of their products. Official statement available on request. |
| RoHS | RoHS (Restriction of Hazardous Substances). Olympic hereby confirms that our products from series LBL, 1000, 3000, 5000, 7000, 8000 and 9000 comply with EU Directive 2011/65/EU (RoHS recast/RoHS 2), as amended by EU 2015/863. Official statement available on request. |
| REACH | Olympic hereby confirms that in case of products from the series LBL, 1000, 3000, 5000, 7000, 8000 and 9000 we always observe the prescriptions of REACH (1907/2006/EC) regulation and the product(s) are fully compliant with the relevant regulation. Official statement available on request. |
| PFAS | At CCL-Olympic, we want to reassure our customers that our products are entirely free of PFAS (Per- and Polyfluoroalkyl Substances), underscoring our commitment to product safety and environmental responsibility. Official statement available on request. |
| ISO | CCL Olympic is ISO9001 and ISO14001 certified. |

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