## **86 / 37 KERATHERM**<sup>®</sup> green

## **Benefits**

- · High electrical insulation
- · Cost effective solution
- · Available with adhesive coating
- · Reinforcement with fiberglass possible

|      | Compression 86 / 37 | 0.6<br>0.5<br>0.4 | 5 |    |          |      |    |          |               |      | Rth / Rti |
|------|---------------------|-------------------|---|----|----------|------|----|----------|---------------|------|-----------|
|      | pre                 | 0.2               |   |    | <b>—</b> |      |    |          |               |      | T.        |
|      | O.                  | 0.1               |   |    |          |      |    |          |               |      |           |
|      | Ö                   | 0                 | 1 | 0  | 20       | 30   | 40 | 50       | 60            | 70   |           |
|      |                     |                   |   |    |          |      |    | press    | ure [N/       | cm²] |           |
| / 37 |                     |                   |   | Rt | th [K/V  | v] — | _  | Rti [Kin | ²/W] <b>—</b> | _    |           |

| Properties                                       |                    | Unit               |   | 86 / 37                |  |  |  |  |  |  |  |
|--|--------------------|--------------------|---|------------------------|--|--|--|--|--|--|--|
| Colour   |                    |                    |   | green                  |  |  |  |  |  |  |  |
| Thermal Properties*                              |                    |                    |   |                        |  |  |  |  |  |  |  |
| Thermal resistance                               | e R <sub>th</sub>  | K/W                |   | 0.32                   |  |  |  |  |  |  |  |
| Thermal impedance                                | ce R <sub>ti</sub> | °Cmm²/             | /W  | 129                    |  |  |  |  |  |  |  |
|  |                    | Kin²/V             | V   | 0.20                   |  |  |  |  |  |  |  |
| Thermal conductiv                                | /ity λ             | W/mk               | <   | 1.8                    |  |  |  |  |  |  |  |
| Electrical Properties*                           |                    |                    |   |                        |  |  |  |  |  |  |  |
| Dielectric breakdo<br>voltage U <sub>d; AC</sub> | wn                 | kV                 |   | 8.0                    |  |  |  |  |  |  |  |
| Volume resistivity                               |                    | Ωm                 |   | 2.5 x 10 <sup>11</sup> |  |  |  |  |  |  |  |
| Dielectric loss fact                             | or tanδ            |                    |   | 6.0 x 10 <sup>-3</sup> |  |  |  |  |  |  |  |
| Dielectric constant a                            | Ē <sub>r</sub>     |                    |   | 2.9                    |  |  |  |  |  |  |  |
| Mechanical Properties                            |                    |                    |   |                        |  |  |  |  |  |  |  |
| Hardness   |                    | Shore              | A   | 65 - 75                |  |  |  |  |  |  |  |
| Tensile strength                                 |                    | N/mm               | 2   | 2.0                    |  |  |  |  |  |  |  |
| Elongation                                       |                    | %                  |   | 75                     |  |  |  |  |  |  |  |
| Physical Properties                              |                    |                    |   |                        |  |  |  |  |  |  |  |
| Application temper                               | rature             | °C                 | -(  | -60 to +250            |  |  |  |  |  |  |  |
| Density  |                    | g/cm <sup>3</sup>  | 3   | 2.29                   |  |  |  |  |  |  |  |
| Flame rating                                     |                    | UL-94              | <b>+</b>                                  | V-O                    |  |  |  |  |  |  |  |
| Possible thickness                               |                    | mm                 |   | 0.125 - 0.5            |  |  |  |  |  |  |  |
| Properties                                       | Unit               | 86/17              | 86/27                                     | 86 / 47                |  |  |  |  |  |  |  |
| Film structure                                   |                    | with<br>fibreglass | with<br>fibreglass<br>and adh.<br>coating | with adh.<br>coating   |  |  |  |  |  |  |  |
| Overall thickness                                | mm                 | 0.225              | 0.250                                     | 0.250                  |  |  |  |  |  |  |  |
| Tensile strength                                 | N/mm²              | 7.5                | 7.5                                       | 2.0                    |  |  |  |  |  |  |  |
| Breakdown<br>voltage U <sub>d; ac</sub> *        | kV                 | 6.0                | 6.0                                       | 8.0                    |  |  |  |  |  |  |  |
| Thermal resistance                               | K/W                | 0.50               | 0.55                                      | 0.39                   |  |  |  |  |  |  |  |





Options

<sup>\*</sup> Measured @ thickness 0.225 mm



## Note

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. KERAFOL® is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. All specifications are subject to change without notice. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded. In case KERAFOL® would be nevertheless held liable, on whatever legal ground, KERAFOL®'s liability will in no event exceed the amount of the concerned delivery. All KERAFOL® products are sold pursuant to the KERAFOL®'s Terms and Conditions of sale and delivery in effect from time to time, a copy of which will be furnished upon request.

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