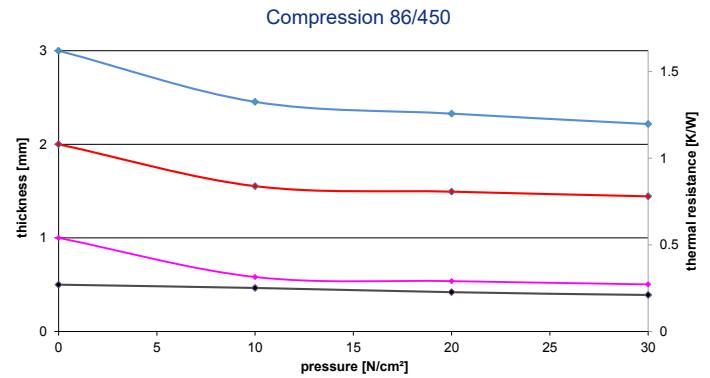


## 86/450

### high thermal conductivity



Properties	Unit	86/450
Colour		brown
Assembly		single layer
<b>Thermal Properties</b>		
Thermal resistance $R_{th}$	K/W	0.27
Thermal impedance $R_{ti}$	$^{\circ}\text{Cmm}^2/\text{W}$	108
	$\text{Kin}^2/\text{W}$	0.18
Thermal conductivity $\lambda$	W/mK	4.5
<b>Electrical Properties</b>		
Breakdown voltage $U_{d; ac}$	kV	5.0
Dielectric breakdown $E_{d; ac}$	kV/mm	10.0
Volume resistivity	$\Omega\text{m}$	$3.6 \times 10^{12}$
Dielectric loss factor $\tan \delta$		$3.0 \times 10^{-3}$
Dielectric constant $\epsilon_r$		2.5
<b>Mechanical Properties</b>		
Measured thickness (+/-10%)	mm	0.500
Hardness	Shore 00	65 - 75
Young's modulus	$\text{N/cm}^2$	95
<b>Physical Properties</b>		
Application temperature	$^{\circ}\text{C}$	-40 to +180
Density	$\text{g/cm}^3$	1.32
Total mass loss (TML)	Ma.-%	< 0.4
Flame rating	UL-94	V-0
Possible thickness	mm	0.5 - 3.0

This group of SOFTTHERM® Films is characterized by its extremely high thermal conductivity. The single layer films without fibreglass reinforcement are soft and compressible. The good dimensional stability of these films ensures a controlled and automated processing.

Data for engineer guidance only.  
Observed performance varies in application.  
Engineers are reminded to test the material in application.

#### Attention

At maximum pressure, SOFTTHERM® Films should not be compressed beyond 30% of the original thickness. In case the material should be compressed more than 30%, the SOFTTHERM® material may leak out.

**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.

**10-2019**