

Thermal conductive paste HPX

An advanced solution for cooling systems, ensuring excellent heat dissipation of $>2.8 \text{ W/mK}$. Developed with reliability and efficiency in mind, the paste creates a durable thermal bridge between electronic components and radiators. Thanks to its resistance to extreme temperatures and diverse environmental conditions, the paste finds applications in a wide range of industries—from advanced electronics to household appliances.

Product features:

- ✓ thermal conductivity $>2.8 \text{ W/mK}$,
- ✓ high temperature resistance,
- ✓ resistant to acids, bases, salts, sulfur dioxide, and ammonia,
- ✓ excellent dielectric properties,
- ✓ versatile applications,
- ✓ easy to apply.

Applications:

- ✓ modules with high thermal conductivity,
- ✓ devices mounted on heat sinks or frames,
- ✓ high-performance and high-speed drives, including HDD and DVD motors,
- ✓ electric motors used in the automotive industry,
- ✓ power converters, communication equipment,
- ✓ laptops and computers, network communication devices,
- ✓ high-power LED diodes,
- ✓ RTV and home appliances, air conditioning systems.

Physicochemical properties

Appearance	Gray paste
Density at 20°C	$\sim 2.0 \text{ g/cm}^3$
Thermal conductivity	$>2.8 \text{ W/mK}$
Operating temperature range	-50°C to 250°C
Temperature resistance range	-50°C to 300°C
Thermal impedance	$<0.095^\circ\text{C in}^2/\text{W}$
Evaporation	0.001%
Leakage	0.05%
Viscosity	Does not flow
Thixotropic index	380 ± 10
Volume resistivity (ASTM D257)	$1.4 \cdot 10^{13} \text{ p}\Omega \times \text{m}$ $1.4 \cdot 10^{15} \Omega \times \text{cm}$
Dielectric loss factor tg δ (ASTM D150)	0.008 (120 Hz) 0.29 (1 kHz) 0.014 (10 kHz) 0.014 (100 kHz)
Relative dielectric permeability ϵ_r (ASTM D150)	5.1 (120 Hz) 3.8 (1 kHz) 15.5 (10 kHz) 15.3 (100 kHz)
Shelf life	3 years

Compatibility:

Silicone Paste HPX is safe for most materials and electronic components. Its electrically insulating formula provides protection against short circuits, making it an ideal choice for demanding applications.

Application method	
Machine application	Yes
Stencil	Yes
Spatula	Yes
Tube	Yes
Cartouche gun	Yes

Usage instructions:

Restricted to professional users. Read SDS carefully prior to use.

Before application, ensure that surfaces are clean and dry. Apply a thin, even layer of paste to one of the contact surfaces of the electronic component, using a suitable tool. The applied layer should not be too thick. Place the heatsink or other cooling element onto the paste.

Package	
Tube	7 g (ART.AGT-275) - 10/300 pcs.*
Cartouche	60 g (ART.AGT-126) - 5 pcs.*
Plastic bucket	100 g (ART.AGT-128) - 8 pcs.* 1 kg (ART.AGT-114) - 1 pc.*

*Quantity of pcs. in a bulk package

Storage:

Store in a well-ventilated, cool, and dry place. Keep containers tightly sealed when not in use. Protect from direct sunlight.

Technical support:

AG TermoPasty provides technical support, answering questions about the technical specifications and applications of our products. Please contact us via email at info@termopasty.pl.

Note:

The data presented in this document reflect our current state of knowledge and describe the typical properties and applications of the product. However, the responsibility for determining the suitability of this product for specific applications lies with the user. AG TermoPasty is not liable for the results of the product's use, as the conditions of its application are beyond our control.

