

POLAR THERM X10



X-10 - Born From German Innovation

Polartherm introduces the X-10, a new thermal paste designed with an excellent price-performance ratio, specifically aimed at the experienced mainstream PC user. With a higher viscosity compared to the X-8, the X-10 is easy to apply, although it is recommended to use the included application tools. This increased viscosity has the advantage of making the thermal paste less affected by the pump-out effect. The thermal conductivity of the X-10 surpasses that of the X-8, making it suitable for processors with a TDP of over 70 watts. This covers Intel's Core i7/i9 and Core Ultra 7/9 processor series, as well as AMD's Ryzen 7 and 9 series.

Quick Facts

- ▶ Excellent price-performance ratio
- ▶ Very high thermal conductivity
- ▶ High durability
- ▶ Easy application

Thermal paste, known in English as "Thermal Interface Material" (TIM), is used to transfer heat away from key components. TIMs include materials such as thermal paste, thermal pads, and liquid metals, all of which help dissipate waste heat. In PCs, waste heat is generated wherever there is significant power consumption: primarily in the CPU (processor) and GPU (graphics card). Other components, like memory and SSDs, also benefit from good cooling. Thermal paste consists of a base material, such as silicone oil, containing microscopic particles like aluminum oxide or zinc oxide. For example, the paste is applied to the CPU's heat spreader (IHS) before mounting the CPU cooler. This fills microscopic gaps between the surfaces of the IHS and the cooler, effectively transferring waste heat.

With its relatively high viscosity, Polartherm X-10 is only minimally affected by the pump-out effect. The pump-out effect gradually squeezes out thermal paste between the heat spreader and the base plate of the CPU cooler due to deformation (concave or convex) caused by heating and cooling cycles. When cooling down, materials like silicon and copper revert to their original shape (flat), leading to variations in thermal expansion rates that particularly intensify the pump-out effect in setups like copper coolers on graphics chips.

Included in the Package

- ▶ 1x X-10 Thermal paste
- ▶ 1x PT Spatula
- ▶ 1x Applicator

Technical data

Unit:	Value/description:
Color:	Grey
Electrical Conductivity:	0 pS/m
Density:	2.6 g/cm ³
Operating temperature:	-50 to +150°C
Typical Applications:	CPU, GPUs, notebooks, ICs

Recommended for processors in the following series:

Intel Core i7/i9
Intel Core Ultra 7/9
AMD Ryzen 7/9

Contents:	2g	5g	10g	40g
Item Number:	PT-X10-002	PT-X10-005	PT-X10-010	PT-X10-040
EAN Code:	4260711990915	4260711990922	4260711990939	4260711990946
Package Size:	2x11,5x1,5cm	3x13x2cm	8x10x2,5cm	4x19x2,5cm
*Net Weight:	5g	8,5g	14,5g	52g
*Gross Weight:	13g	19g	25,5g	71g
Packing Unit (PU):	115 Pcs.	80 Pcs.	60 Pcs.	20 Pcs.

*Net weight is the total weight of an article excluding the weight of packaging and accessories. The gross weight refers to the total weight of the product including accessories and packaging. Slight weight deviations are possible due to production factors.

Please note

The information in this technical data sheet is based on our current knowledge and experience. Due to the variety of potential influences in practical application, this information does not exempt the processor or user from conducting their own tests and trials. No legally binding guarantee of specific properties or suitability for a particular application purpose can be derived from our information. We reserve the right to make changes to product specifications in line with technological advancements or operational developments. Our recommendations do not relieve the user of the responsibility to investigate and, if necessary, resolve any issues related to potential infringements of third-party intellectual property rights. In individual cases, we recommend consulting with us. Printing errors are excepted.