

# POLAR THERM X8



## X-8 - Born From German Innovation

Polartherm introduces the X-8, a new thermal paste designed with an outstanding price-performance ratio, specifically created for mainstream PC users. As a low-viscosity thermal paste, the X-8 is very easy to apply since it spreads across the CPU heat spreader through the contact pressure of the CPU cooler alone. Although application tools are not strictly necessary, they are included with the paste. The thermal conductivity of the X-8 is good, making it suitable for gaming PCs with processors that have a thermal dissipation power (TDP) of up to 70 watts. This covers Intel's Core i3/i5 and Core Ultra 3/5 series processors, as well as AMD's Ryzen 3 and 5 series.

### Quick Facts

- ▶ Outstanding price-performance ratio
- ▶ High thermal conductivity
- ▶ High durability
- ▶ Easy application

Thermal paste, referred to in English as "Thermal Interface Material" (TIM), is a heat-conductive medium. TIMs include materials such as thermal paste, thermal pads, and liquid metals, all of which serve to dissipate waste heat. In PCs, waste heat is generated wherever significant power is consumed: primarily in the CPU (processor) and GPU (graphics card). Other components, such as memory and SSDs, also benefit from effective cooling. Thermal paste consists of a carrier material, such as silicone oil, that contains microscopic particles like aluminum oxide or zinc oxide. For instance, the paste is applied to the CPU's heat spreader (IHS) before mounting the CPU cooler. The paste fills microscopic gaps between the surfaces of the IHS and the cooler, facilitating efficient heat dissipation.

Despite its low viscosity, Polartherm X-8 is only slightly affected by the pump-out effect when used as intended. The pump-out effect occurs gradually, as thermal paste is squeezed out from between the heat spreader and the CPU cooler's base plate. This happens because the heat spreader and base plate deform under temperature load (becoming concave or convex) and return to their original shape (flat) when cooled. Different materials, such as silicon and copper, have different rates of thermal expansion, which can make the pump-out effect particularly pronounced in setups using copper coolers on graphics chips.

### Included in the Package

- ▶ 1x X-8 Thermal paste
- ▶ 1x PT Spatula
- ▶ 1x Applicator

### Technical data

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

### Recommended for processors in the following series:

Intel Core i3/i5  
Intel Core Ultra 3/5  
AMD Ryzen 3/5

Contents:	2g	5g	10g	40g
Item Number:	PT-X8-002	PT-X8-005	PT-X8-010	PT-X8-040
EAN Code:	4260711990953	4260711990960	4260711990977	4260711990984
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.