1) Basic Information
Thermal Heat Conductivity of a material gives the possible flow of heat through the material, when the temperatures on the outside is different to the inside e.g. of a pipe. The lower the value the better the insulation value. The heat conductivity is measured at a medium temperature in the material of 50°C.

2) Graphic overview

![Thermal Heat Conductivity (ASTM C 177)](image)

3) Results
Copper has the highest heat transfer, but also the other metal pipes are giving a much higher heat conductivity compared to PB-1. Metal pipes show practically the same temperature on the outside as on the inside. PB-1 dimension 63x5,8 has got an outside temperature of 68°C, when inside has 95°C.

Practically PB-1 can be installed with less insulation.

4) References/Standards
In District Heating systems PB-1 pipes have been installed since 1981 with great success.

Technical data are subject to alteration.