

Thermally Conductive Alumina Fillers

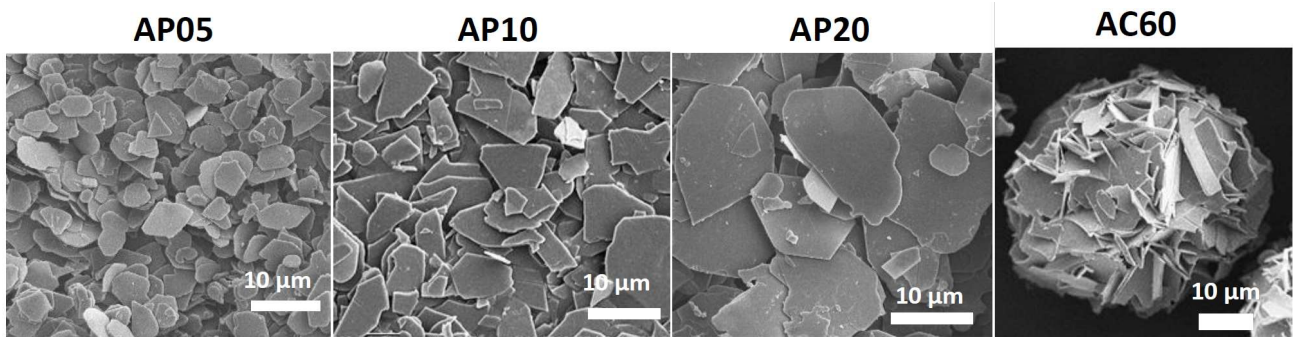
A good heat management in electronic parts is critical to maintain performance and reliability over a long time. With ever decreasing sizes of electronic parts manufactured from polymers the heat management is becoming crucial.

DIC has developed highly thermally conductive alumina fillers, synthesized by DIC's novel technology. The high cristallinity and precisely controlled shapes are used in numerous applications where thermal management is needed, such as automotive, aerospace, electronics and mecatronics.

Features

Features compared to alternatives (Spherical Al, BN, AlN):

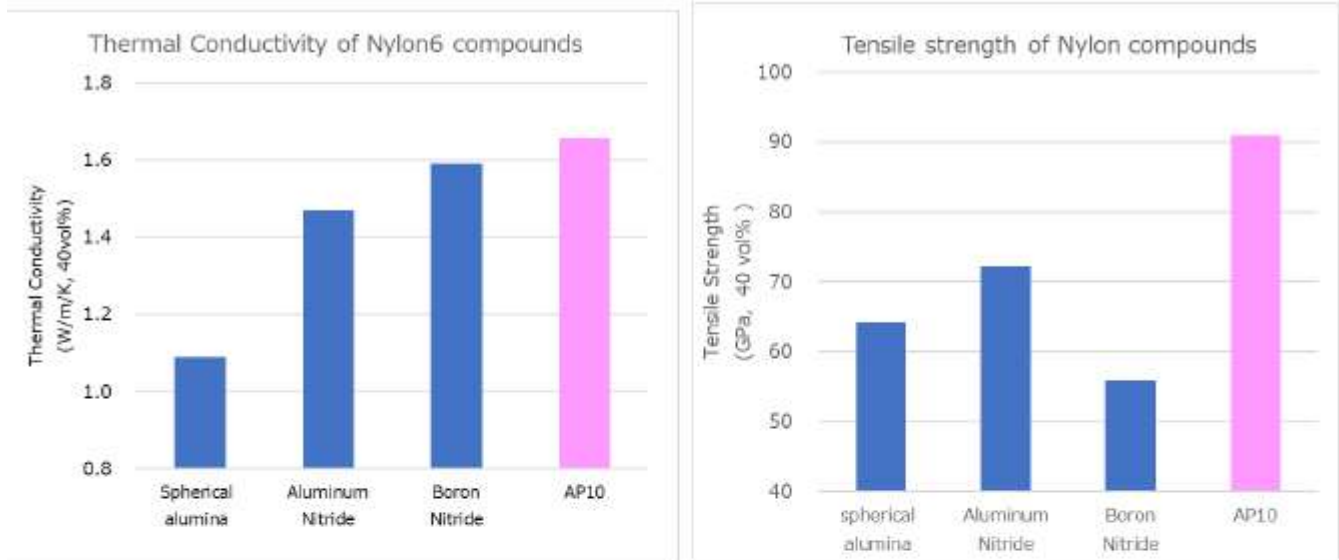
- best thermal conductivity
- easy to process at high load levels
- less screw wear
- better mechanical properties of resin compounds
- better thermal properties of resin compounds
- price competitive
- packaging: 25 kg paperbags



Specifications

Grade		AP05	AP10	AP20	AC60
Shape		Platelet	Platelet	Platelet	aggregated
Particle Size	um	4-5	6-8	11-13	30-40
Thickness	um	0,2	0,4	0,4	-
Aspect Ratio		ca. 25	ca. 15	ca.30	-
Bulk Density	g/ccm	0,1- 0,2	0,4- 0,5	0,3- 0,4	0,5-0,6
		For thin injection parts	standard grade, commercially available	high performance grade	Application: thermal conductive sheets

Application example of Nylon compounds containing 40 vol% fillers



Application example of greases, thermal conductive sheets containing 20 vol% fillers

