

# Pyrolytic graphite

[Science](#), [Chemistry](#)



Pyrolytic Graphite Pyrolytic Graphite Pyrolytic Graphite is formed by decomposition of a hydrocarbon gas in a chemical vapor deposition furnace at very high temperature (PG, 2014). It is anisotropic, the anisotropy is because it is layered. It exhibits a thermal conductivity close to the best conductors in the " ab" plane and lower than alumina brick in the " c" direction. It also has good thermal, mechanical, and electrical properties which are far better than normal graphites. The figure below shows a pyrolytic graphite (PG, 2014).

Because of its low particulates and chemical resistance to gases which are fluorine-based, it is used to solve problems in semi-conductor and plasma etching systems. In addition, it is highly diamagnetic, hence used for medical applications (PPG, 2012). It also has wide applications in industries facing excessively high stress, temperature, friction and corrosion, but requires a material which are light in weight (PPG, 2012). The table below shows some of the typical properties of pyrolytic graphite.

Top of Form

Bottom of Form

Typical properties of graphite (PPG, 2012)

References

Pyrolytic Graphite (2014). Retrieved from <http://www.momentive.com/Products/Main.aspx?id=22873>

Pyrolytic graphite (2012). Retrieved from <http://www.minteq.com/our-products/minteq-pyrogenics-group/pyrolytic-graphite/>

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