

# [Pyrolytic graphite](https://assignbuster.com/pyrolytic-graphite/)

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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 anistropic, 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 prylotic 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 corossion, but requires a material which are light in weight (PPG, 2012). The table below shows some of the typical properties of pryloic 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
Pyroid pyrolytic graphite (2012) . Retrieved from http://www. minteq. com/our-products/minteq-pyrogenics-group/pyroid-pyrolytic-graphite/