

# Characteristics of Coal and Anthracite

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## Introduction

Coal is a rock made of nearly immaculate or pure carbon. The coal in different deposits have different compositions, thus, coal is classified in various categories. Anthracite is categorized as a dark black form of coal and the highest quality grade. It is very hard, has low moisture content and a carbon content of nearly 95. Moreover, anthracite is usually the oldest sort of coal, having shaped from biomass that was buried 350 million years back. The formation of anthracite not only takes a long time, but moreover requires exceptionally high temperatures. The temperatures essential for the development of anthracite coal are as it were conceivable on the borders of mountain belts. These regions are appropriate since the method of building a mountain pushes sheets of rock over the layers where coal is being formed. This comes about within the layers containing coal being pushed down to profundities of 8 to 10 km where the temperature can reach 300 C.

## Characteristics

Anthracite contains a high quantity of fixed carbon 80 to 95 percent and exceptionally low sulfur and nitrogen lower than 1 percent each. Volatile matter is low at roughly 5 percent, with 10 to 20 percent ash possible. Moisture content is generally 5 to 15 percent. The coal is slow-burning and troublesome to ignite because of its high density, so few pulverized, coal-fired plants burn it.

## Heating Value

Anthracite burns the hottest among coal types (generally 900 degrees or higher). Waste coal disposed of in the midst of anthracite mining, called culm, contains generally 10 to 20 Btu per pound. It can be utilized for a assortment of purposes in all fields and industries. A few of the common uses of are as follows.

## Heating Systems

As one of the foremost brittle kinds of coal, anthracite is the perfect resource to utilize for the generation of heat for an extended amount of time. As the coal is burnt, it produces a hot blue flame that can generate

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