

# What is a Formula One Car made of?



- Aluminium (alloy with Titanium, Copper and Nickel). Mined in Australia, Guinea, Jamaica, Brazil and India.
- Beryllium (Copper-Beryllium alloy for motor components). Mined in the USA, China, Russia and Brazil.
- Carbon fibres (bodywork). Main producers are Japan, the USA, UK, France and Germany.
- Cobalt (alloy with Nickel and Iron). Mined in the Democratic Republic of the Congo, Zambia, Canada, Cuba, Australia and Russia.
- Iron ore (Steel). Mined in China, Republic of Korea, Japan, Canada, Belgium, Russia, Peru and Brazil.
- Magnesium (Magnesium alloys). Mined in China, North Korea, Russia, Austria, Greece and the USA.
- Natural Rubber (tires). Mined in Thailand, Indonesia, Vietnam, India, Ivory Coast.
- Nickel (power unit). Mined in Australia, New Caledonia, Russia, Indonesia, Cuba and Dominican Republic.
- Platinum (Platinum-Iridium and Platinum-Ruthenium alloys). Mined in Canada, Russia, South Africa, the USA, Zimbabwe and Australia.
- Silicon (Silicon carbide). Mined in United States, Italy, Germany, UK, Australia, France, Spain, Japan, Poland, Hungary, South Africa, Mexico, Austria, Iran, Republic of Korea, Slovakia, Canada, Belgium, India, Bulgaria, Norway, Chile, Gambia, Turkey and Czech Republic.
- Titanium (alloy). Mined in Australia, Sierra Leone, South Africa, Russia and Japan.
- Tungsten (as base alloy). Mined in China, Russia, Canada, Austria, Bolivia and Portugal.

# SOURCES

Researcher: Greta Gorzoni, Dafne Moruzzi, Lorenzo Ricci, Gabriele Serafini. Istituto Superiore Montessori-Da Vinci, Altoreno Terme, Bologna.

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# INTERESTING FACTS

- In F1 engine usually revs up to 18.000 rpm. This means that the piston travels up and down 300 times a second. Road car engines rev up to 6.000 rpm at max.
- The brake discs in an F1 car have to withstand the operating temperature of approximately 1000 degrees Centigrade, typically the average temperature of molten lava. They are made of carbon fibre which is much harder than steel and has a higher melting point.
- The average cost of F1 car is 6,8 million, that is the price of the most basic components. It doesn't include hundreds of millions spent on development and research.
- Small planes can take off at slower speeds than F1 cars travel on the track. However, an amazing aerodynamic downforce provided by their wings keeps them on the track.
- In the Spanish GP in 1976 Tyrell Racing Organisation released a brand new F1 car that went down in history as the first and only six-wheel racing car, the P34. The great mobility involved a greater speed in the corners but did not increase the top speed. However Jody Scheckter, the fist driver, managed to win the Swedish GP and was ranked third in the final classification. The following year the P34 didn't get any good result and was finally retired for the excessive consumption of tires.