



# DATA SHEET

## SOLAR SYSTEM: SATURN

Famous for its multiple rings, the sixth planet is unique among its seven neighbours. It is not the only planet to have rings— chunks of ice and rock—but none are as spectacular or as complex as those of Saturn.

Like Jupiter, Saturn is made mostly of hydrogen and helium. At its centre is a dense core of metals like iron and nickel surrounded by rocky material and other compounds solidified by the intense pressure and heat. It is enveloped by liquid metallic hydrogen inside a layer of liquid hydrogen— similar to Jupiter's core but considerably smaller.

### SOME FACTS ABOUT SATURN

- 1 Saturn is 9.5 Astronomical Units (AU) from the Sun. That's 1.4 billion kilometres
- 2 Temperature at 1 bar pressure/K = 135
- 3 Saturn's atmosphere is predominantly of hydrogen. The clouds of gas form bands parallel to the equator. Winds at the equator can reach  $500 \text{ m s}^{-1}$
- 4 It's mean density is:  $0.69 \times 10^3 \text{ kg m}^{-3}$  Saturn's mean density is less than water. The giant gas planet could float in a bathtub if such a colossal thing existed.
- 5 It's comparative volume is 755 (Earth = 1)
- 6 Saturn rotates in just 10.7 hours this causes the atmosphere at the equator to bulge.
- 7 The famous rings are formed from icy particles and boulders, these range in size from a centimetre to a few metres in size.