



DATA SHEET

SOLAR SYSTEM: URANUS

80% or more of the mass of Uranus is made up of hot dense icy materials - water, methane and ammonia - above a small rocky core.

Uranus gets its blue-green colour from methane gas in the atmosphere. Sunlight passes through the atmosphere and is reflected back out by the cloud tops. Methane gas absorbs the red portion of the light, resulting in a blue-green colour.

SOME FACTS ABOUT URANUS

- 1 Uranus is 19.2 Astronomical Units (AU) from the Sun. (2.9 billion kilometres)
- 2 Temperature at 1 bar pressure/K = 165
- 3 Uranus' atmosphere consists of hydrogen with some helium and methane
- 4 Its mean density is: $1.32 \times 10^3 \text{ kg m}^{-3}$
- 5 Its comparative volume is 52 (Earth = 1)
- 6 One day on Uranus takes about 17 hours (the time it takes for Uranus to rotate or spin once). And Uranus makes a complete orbit around the Sun (a year in Uranian time) in about 84 Earth years
- 7 Uranus is the only planet whose equator is nearly at a right angle to its orbit, with a tilt of 97.77 degrees—possibly the result of a collision with an Earth-sized object long ago. This unique tilt causes the most extreme seasons in the solar system. For nearly a quarter of each Uranian year, the Sun shines directly over each pole, plunging the other half of the planet into a 21-Earth year-long, dark winter.

Uranus rotates in the opposite direction than most of the planets - Venus does too.