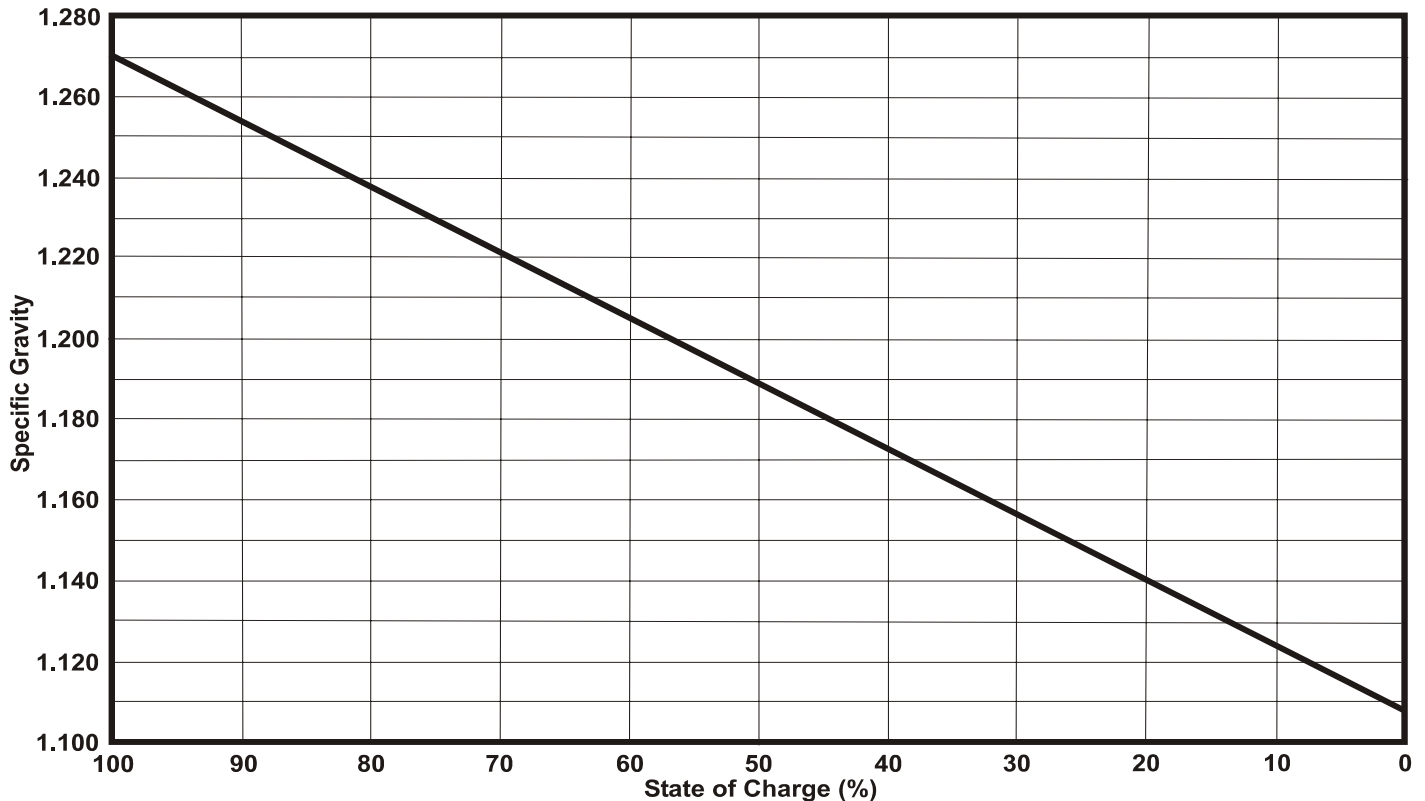


RAYLITE M-SOLAR BATTERIES SPECIFIC GRAVITY @ 25°C

State of Charge versus Specific Gravity of M-Solar Cells



BOOST CHARGING OF VENTED LEAD-ACID CELLS

Lead acid batteries in a discharged state undergo two independent reactions when being recharged. In the first stage, the depleted active materials are reconverted into their usable (charged) states. All of the energy from the charger, other than that being used to overcome the ohmic resistance of the battery, is utilised in this reaction, and charging efficiency is very high.

At the end of this stage, electrolysis of the water in the electrolyte begins, with the liberation of oxygen and hydrogen gas. In this gassing stage, the further reconversion of active material continues at a progressively slower rate with an increasing amount of charging energy used preferentially in driving the gassing process. Heat is generated and it becomes necessary to lower the rate of charge to protect the battery. Uncontrolled charging results in temperatures high enough (>50°C) to destroy the battery.



RAINBOW POWER COMPANY LTD

A.B.N. 74 003 323 420

1 Alternative Way, Nimbin, NSW, Australia 2480

phone: (02) 6689 1430

international: phone: +61 2 6689 1088

e-mail: sales@rpc.com.au

fax: (02) 6689 1109

international: fax: +61 2 6689 1109

web site: www.rpc.com.au