Previous research indicates that alcohol dampens negative affect and is sometimes used in the regulation of psychological distress (see Greeley & Oei, 1999; Sher, 1987). Other work indicates that individuals using less effective emotion regulation strategies are at heightened risk for developing alcohol use problems (Cooper et al., 1995). To date, however, no research has directly tested the extent to which an acute dose of alcohol differentially influences individuals differing in emotion regulation styles. The primary purpose of the current research is to investigate whether individual differences in emotion regulation modulate alcohol’s effects on a trial and error learning task designed to engage both emotional and cognitive processes, using a combined behavioral and psychophysiological approach. Participants were randomly assigned to one of three beverage groups (alcohol, placebo, or control beverage) and then engaged in a trial-and-error learning paradigm (Holroyd & Coles, 2002) while event-related brain potentials (ERPs) were recorded. Individual differences in emotion regulation were assessed by the emotion regulation questionnaire (ERQ; Gross & John, 2003). Results show, that overall Reappraisers in the alcohol condition showed decreased ERN amplitudes and worse performance in comparison to the control group. Conversely, Suppressors showed no effect of beverage group on ERN amplitude or performance. Taken together these results indicate that Suppressors may be particularly at risk for developing substance abuse problems because of they are able to experience the reinforcing effects of alcohol with very little cost.