In this study, properties of colemanite including concretes, exposed to freeze-thaw, were investigated. In all mixtures, the water/cement ratio (w/c) and cement dosage were constant as 0.48 and 400 kg/cm$^3$ respectively, and colemanite was replacement (as volume ratio) with aggregates by 10-20-30-40 and 50% rates. Produced concrete samples were applied 90 days additional cure ($t=90$) in 5% sodium sulfate solution after 28 days initial cure (water curing) ($t=0$). Afterward from curing process, samples were subjected to freeze-thaw test of 30 cycles, each cycle is two hours freezing and 1 hour thaw. After the 30 cycles some physical and mechanical properties of concretes were measured such as ultrasonic pulse velocity, schmidt surface hardness and compressive strength.