The susceptibility of third-instar larvae of Spodoptera exempta (Wlk.) to a heat-treated nuclear polyhedrosis virus was tested in the laboratory. The polyhedral suspension was purified by differential centrifugation and heat-treated at temperatures that ranged from 20 to 90 deg C for 10-30 min. The LT50 ranged from 108.4 h for virus heated at 50 deg C (10 min) to 162.2 h for virus heated at 80 deg C (10 min). The fiducial limits to the LD50s were calculated at 0.95 probability.