Sound Guard Lubrication technology originally developed for a series of NASA satellites has produced a commercial product for protecting the sound fidelity of phonograph records. Called Sound Guard, the preservative is a spray-on fluid that deposits a microscopically thin protective coating which reduces friction and prevents the hard diamond stylus from wearing away the softer vinyl material of the disc. It is marketed by the Consumer Products Division of Ball Corporation, Muncie, Indiana.

The lubricant technology on which Sound Guard is based originated with NASA's Orbiting Solar Observatory (OSO), an Earth-orbiting satellite designed and built by Ball Brothers Research Corporation, Boulder, Colorado, also a division of Ball Corporation. Ball Brothers engineers found a problem early in the OSO program: known lubricants were unsuitable for use on satellite moving parts that would be exposed to the vacuum of space for several months. So the company conducted research on the properties of materials needed for long life in space and developed new lubricants. They worked successfully on seven OSO flights and attracted considerable attention among other aerospace contractors. Ball Brothers now supplies its "Vac

Kote" lubricants and coatings to both aerospace and non-aerospace industries and the company has produced several hundred variations of the original technology.

Ball Corporation expanded its product line to include consumer products, of which Sound Guard is one of the most recent. In addition to protecting record grooves, Sound Guard's anti-static quality also retards particle accumulation on the stylus. During comparison study by a leading U.S. electronic laboratory, a record not treated by Sound Guard had to be cleaned after 50 plays and the stylus had collected a considerable number of small vinyl particles. The Sound Guard-treated disc was still clean after 100 plays, as was its stylus.



