

Core Technologies

Verbatim has always been at the forefront of technological innovation. We are able to maintain our leadership and market the very latest products and technologies due to the extensive research and development that is undertaken by our parent company Mitsubishi Kagaku Media in Japan.

We pride ourselves on our 'Core Technologies'.

Double Layer



The first recording layer of the Verbatim Double Layer disc is semi-transparent, providing enough reflectivity for writing/reading data on the first layer, yet transmitting enough laser power to read/write on the second layer by refocusing the laser. In addition to optimising layer reflectivity, AZO recording dyes were developed by MKM for each layer to optimise parameters such as signal amplitudes and power margins to ensure compatibility with current DVD standards.

The media works with two recording layers; layer 0 has a special reflective layer that allows the laser to pass through it so it is able to reach the second layer (layer 1)

AZO





Used with Verbatim DVD Recordable media.

Ultimate resistance to UV light for increased protection and reliability. High quality picture and sound with more than 100 years archival.

The AZO recording layer not only withstands the extremely high laser and rotation speeds of the new drives, it also maximises their performance. Verbatim has paid particular attention to the durability and light fastness of AZO; tests show that it is more stable than most recording dyes and the least affected by ultraviolet light.

The recording dye is critical to CD-R performance; its molecular structure must be designed to absorb the typical wavelength of a CD-R drive laser, which is around 780nm. The peak absorption wavelength needs to be optimised so that the disk is compatible with a wide range of recording speeds.

If the peak is too short, disk sensitivity is reduced, which causes high-speed recording problems; but if the wavelength peak is too long, this reduces the reflectivity of the recording layer and can creates read errors in many drives.

AZO offers high sensitivity for reliable high-speed recording and high reflectivity to eliminate read errors. The thinness of the recording layer is also critical. The thinner the layer, the higher its sensitivity and power margin, and the better its high-speed recording capabilities.

HARD COAT



Used with Verbatim DVD Media

A specially created tough coating for DVD media that is superbly resistant to scratches

Some DVD's are handled extensively, for example 8cm DVD's are constantly placed in and out of the camcorder in external environments. To protect from potential damage, Verbatim 8cm DVD's benefit from a 'Hard Coat' protective layer. This layer protects from fingerprints, dust, scratches, static and water. Testing is believing!

CRYSTAL



Used with Verbatim CD-R media.

A tough, clear surface layer for increased protection against accidental surface damage

Data CD's need to be as robust as possible as they are often used during travel and may not always be stored in jewel cases or protective sleeve. As a result, scratches can occur on the surface of the disc, which means reduction in quality and in many cases, loss of data.

With this in mind we developed the 'Crystal' surface; a tough clear surface that has improved scratch resistant properties, reducing the risk of losing precious music tracks or important data information.

Make sure your music and data are 'Crystal' Clear.

SERL



Used with Verbatim DVD Rewritable, CD-RW 10x - 32x media.

A special recording layer present on Verbatim's CD-RW and DVD/RW media that ensures noise-free recording time and time again.

Verbatim's CD-Rewriteable (CD-RW) and DVD-Rewriteable (DVD+/-RW) use a Super Eutectic Recording Layer (SERL). With conventional rewriteable media, the recording layer deteriorates with every rewrite, meaning a decrease in quality. With Verbatim rewriteable media however, the recording layer is returned to perfect condition on every erasure, leaving a flawless disk for the next recording. SERL also enables this media to enjoy excellent archival stability and high-speed recording. This means users can enjoy perfect, high-speed data storage every time.

MABL



Used with Verbatim BD-R media.

Metal Ablative Recording Layer. A specially created inorganic recording layer present on Verbatim's BD-R media ensures excellent recording compatibility and prolonged stability for archival life.

1MB = 1,000,000 bytes 1GB = 1,000,000,000 bytes. Some of the capacity is used for formatting and other functions, and thus is not available for data storage.