

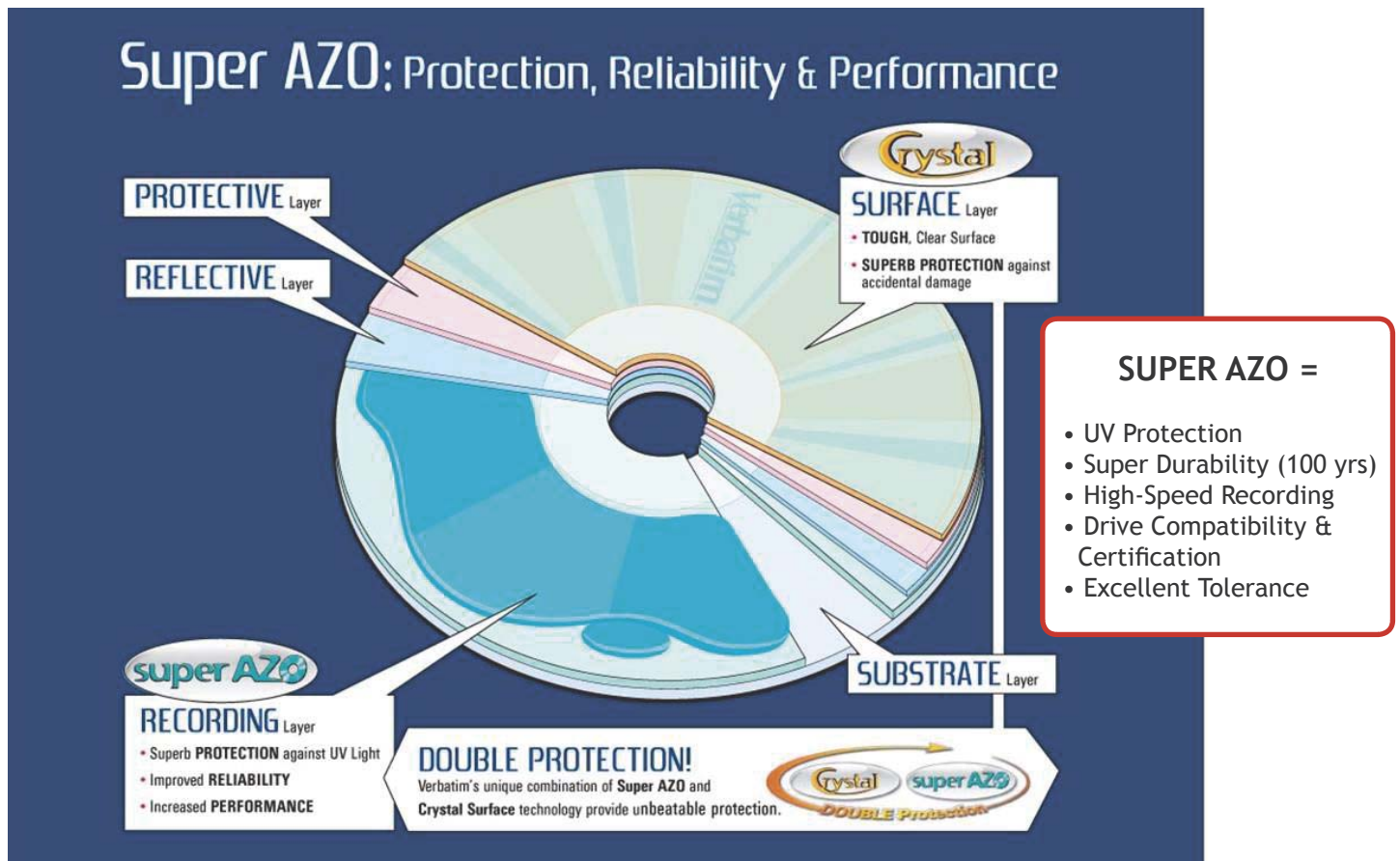
SUPER AZO ~ Used with Verbatim 1-52X DataLifePlus CD-R Media

The Super AZO recording layer not only withstands the extremely high laser power and high rotation speeds of the new drives, it also maximises their performance. Verbatim has paid particular attention to the durability and light fastness of the dye. Tests on Super AZO show that it is significantly more stable than other 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. If laser power is set above and below optimum, pit geometry is affected and will create read errors in different drives. The Super AZO recording layer is optimised to provide a wide power margin which ensures compatibility between the discs and a wide range of drives with different recording speeds.

Super 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. Normally, the thinner the dye, the easier it is to record at high speed. However thinner dye also results in disc longevity being compromised. Super AZO is more than twice as thick as other dyes, yet provides excellent electrical recording performance without sacrificing disc life.



Crystal ~ Used with Verbatim CD-R Media

Both Audio and 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.

CRYSTAL =

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

Double Protection ~ Used with Verbatim CD-R Media

Verbatim Audio CD-R and CD-R media discs provide you double protection. At Verbatim we understand the importance of storing and preserving information. Further more, we recognise that Audio/music CD media has to be robust as it is often used in portable players and may not always be stored in a jewel case or protective sleeve. With this in mind we developed the 'Crystal' surface; a tough clear surface that improved scratch resistant properties, reducing the risk of losing precious music tracks. Combined with our Metal AZO technology, you have peace of mind of "Double Protection" as Metal AZO qualities ensure long term durability and high performance 'Crystal Clear' playback!



This Double Protection is also used on our data products and was designed with today's 'Road Warrior' in mind. More and more people are now travelling with laptop/notebook PC's and often data is carried on CD-Recordable media. Once again, the data is at risk from the surface being scratched as often as presentation/documents are being read in plane, train or taxi and these are hardly ideal environments.

The compatibility with CD drives that are standard in nearly every computer system sold, dramatically simplifies information exchange for individuals and organisations. Data written on Verbatim quality CD-R media can be read on nearly all of the more than 600 million CD drives and one billion CD players in use today.

DOUBLE PROTECTION =

- Combines the benefits of AZO dye technology and the Crystal surface layer

SERL ~ Used with Verbatim 2-4X, 4-12X CD-RW Media & DVD ReWriteable

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.



Advanced SERL ~ Used with Verbatim 16-24X CD-RW Media

Advanced SERL, a patented recording layer developed by Verbatim, ensures high reliability and durability at 24x speed. Advanced-SERL overcomes the difficulties in CD-RW re-writing to ensure sufficient erasability at high speeds, reduction of media noise during erase/rewrite cycles, and a long archival life.



Advanced SERL+ ~ Used with Verbatim 32X CD-RW Media

The development of Verbatim's 32X Ultra Speed+ CD-RW media was a result of two significant advances in Verbatim's cutting edge recording technologies. The company enhanced its Advanced SERL (Super Eutectic Recording Layer) with Advanced SERL +. This patented recording layer ensures both reliability and durability at this higher speed. This development overcame the difficulties associated with being able to allow sufficient erasability at this high speed. Advanced SERL + prevents excess media noise during erase/re-write cycles, crucial to the successful long life of the media.



Secondly, the 32x CD-RW disks incorporate the 2T Writing Strategy, a writing method first seen in Verbatim's 16-24x media. This writing method is required because at 24x and higher recording speeds, conventional recording technology cannot generate enough "cooling time" for creating stable amorphous marks. Verbatim's 2T Writing Strategy overcame this issue to provide stability of the recorded mark as well as supporting quality high-speed erasure. This technology was recognised as a significant breakthrough at the time of its introduction and continues to facilitate the development of higher speed RW media.

SERL, Advanced SERL(+) =

- Archival Stability & Longevity
- High-Speed Recording
- Reduction of media noise during erase/rewrite cycles

ADVANCED AZO ~ Used with Verbatim DVD Recordable Media

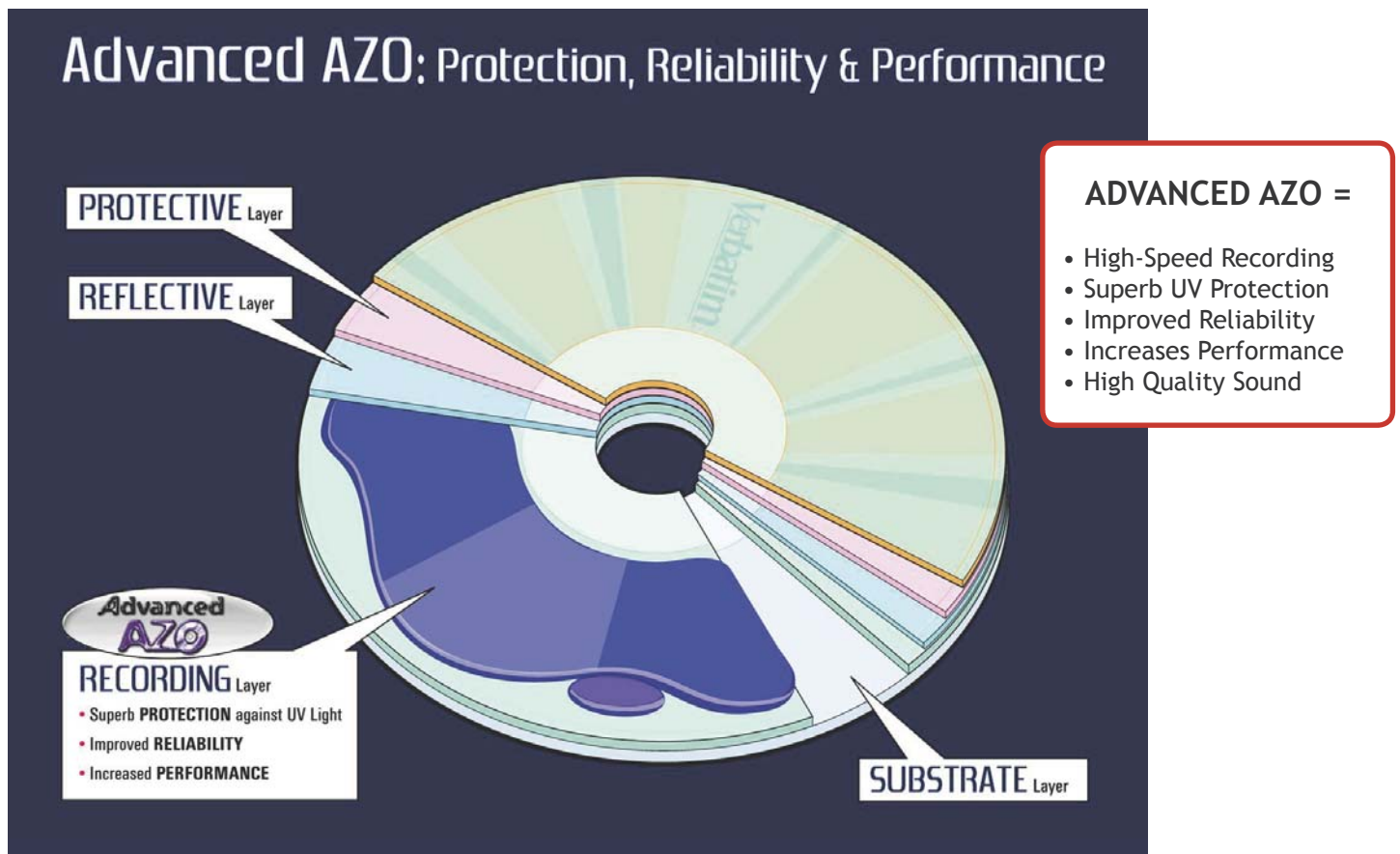
The key component in achieving high-speed DVD Media that delivers optimum performance, superior quality and the broadest compatibility (including backward compatibility with existing DVD recorders and DVD burners) is the proprietary recording layer technology developed by Verbatim, Advanced AZO.



The patented AZO dye features excellent thermal and optical properties for a wider power margin and increased sensitivity to laser light for high-speed recording. Reliability is enhanced by controlling the heat interference between recording marks, which reduces degradation of the recording marks. This minimizes the jitter and enables superior recording characteristics across the entire range of available recording speeds, from 1X through 16X.

Advanced AZO dye is also utilised on both layers of Verbatim's Double Layer 8.5GB DVD Media.

Reliable, high-speed recording and broad compatibility makes Verbatim's Advanced AZO DVD discs ideal for sharing computer data, home videos, photos, and music.



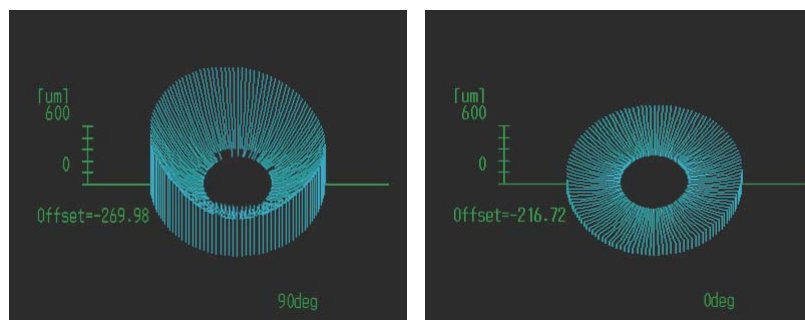
Ultra Precise Molding (UPM) ~ Used with Verbatim CD-R & DVD Media

A crucial element in the production of quality high-speed optical media is maintaining a flat media shape. If the media shape is not controlled and becomes warped, it is difficult for the laser pick up to properly focus the beam spot. Thus the necessary power for recording data is not exposed to the dye layer.

Since Verbatim can design and develop their own mold and stamper, they have the ability to technically control their media shape. In addition, a stringent quality control system is applied to the injection molding process.

All Verbatim optical discs are produced using Ultra Precise Molding (UPM) technology. With UPM, the deflection or tilt of the substrate is minimised so the media spins smoothly at high speeds, regardless of the type of drive. Stable rotation during the reading and writing process virtually eliminates the possibility of errors.

EXAMPLE OF MEDIA SHAPE



OTHER 52X Media

Verbatim 52X Media

Drive Certified

Verbatim's extensive R&D capabilities, coupled with engineering expertise, provides us with the ability to deliver superior optical media technologies. Close working relationships with hardware vendors enables us to be the first to market with the latest technologies and fastest recording speeds, as well as ensuring compatibility with a wide range of hardware products.

Verbatim maintains direct communication with all of the major writer manufacturers worldwide, and works together with these manufacturers to attain complete compatibility. Verbatim remains at the forefront of the optical media evolution, being first to market with 8 new technologies since 2000 alone, including Double Layer, 8X and 16X DVD Media in 2004. As a result, in many instances drive manufacturers use Verbatim media for tuning their drives on the production line. Verbatim media is repeatedly amongst the first to attain drive certification from leading drive manufacturers.

For more information on Verbatim products,
visit www.verbatim.com.au

