Erasing Hybrid Drives with Blancco Drive Eraser / Blancco 5

An hybrid drive or SSHD (for Solid State Hybrid Drive) is a composite non-volatile storage device. It has two separate areas of storage: some flash memory (the SSD portion, a fraction of the total capacity) and spinning magnetic platters (just like a regular HDD).

Since Blancco 5.10.0, hybrid drives can be detected, reported and displayed in the user interface as “SSHD”. Blancco Drive Eraser will first attempt a programmatic detection of the drive. If a drive is not detected as a hybrid through programmatic means, then Blancco Drive Eraser will compare its model with an internal (embedded) white list of known hybrid drives: if there is a match, then the drive in question will by marked as an SSHD. Note that the user can update the white list (add/remove models) via the Drive Eraser Configuration Tool (2.0 or newer).

If a hybrid drive has undertaken a successful erasure and verification process, this means that only the part that has been presented to the software (usually the magnetic HDD) will be processed. Since it is not currently possible to verify the erasure of the hidden (usually the flash) part of the hybrid, no guarantees can be provided against recovery of data using laboratory techniques. The erasure of a hybrid drive will protect against non-invasive attacks at a software level only since the memory management of data is performed internally by the drive. After erasing a hybrid drive, there will be an exception in the report warning about its presence. Additionally, there is not enough research available to suggest that firmware erasure methods (such as ATA Secure Erase) will address both parts of the storage and it is not possible to verify this without the appropriate tools. Therefore, the same applies as above for this process: assurances can be given about the accessible part of the storage only.