Molecure Tape

A strong and versatile sealing tape used by the Star Army of Yamatai since YE 30.

History and Background

Molecure Tape was originally not intended for use as a tape, but as a more powerful seal to quick-seal hull breaches in space. However, its ability to bond to nearly every type of known material made it into far more. Kage Yaichiro began working on the tape in YE 30, eventually intending to use it in all manner of applications.

Construction

Molecure Tape is actually made of two layers of a tightly woven polyester cloth, impregnated with a material called Molecure Solution which is specifically engineered to make VERY tight molecular bonds with anything. However, the tape is designed to release its molecular bonds when an exact electrical charge is applied. The tape never loses its stick, and comes in an electrically charged dispenser to prevent it from sticking to itself while stored. The charged cutting edge can merely be touched to the tape to remove it without any sign it was there. A different charge can be applied to make the stick permanent.

The polyester polymer naturally is resilient, but the tape's ability to hold molecular bonds in place actually prevents certain chemical processes, such as ignition of flame. As such, the tape is not flammable unless the needed electrical release charge is made. In short, the tape does not let go of its molecules, and will not serve as fuel to the fire on the molecular level, nor will it undergo any chemical process requiring a change of molecular structure. This simple premise is also responsible for its difficulty to tear or stretch, its space-tight seal, etc. It also gives the tape the ability to resist strongly acidic or basic compounds. This impervious nature vanishes once the bonds are disabled by electrical charge.

It will still adhere to acidic and basic materials (which show as a stain), but these will not cause harm to the tape until the electrical charge is applied and it loses its resilience. It is still possible to damage with energy or antimatter weapons, which bypass the bonds to attack the matter directly at below the molecular level (atomic, subatomic).

Uses

This tape can be used in many ways. In the Army, It is often used to seal wounds and hull breaches in Power Armors against space, quickly fix pipe and wiring, tape together limbs so a Neko can heal more easily, and a myriad of other uses. Released to the civilian sector, it is often carried in medical and survival kits, or even household work. Last update: 2023/12/21 01:01 stararmy:equipment:molecure_tape https://wiki.stararmy.com/doku.php?id=stararmy:equipment:molecure_tape

Recommended for use in Medical Kits, Survival Kits, Power Armors, Shuttles, and Engineering Blocks.

Note: Due to Zesuaium non-interactive properties Molecure Tape will not adhere.

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