3D-stabilized Hypercrystal

3D-stabilized hypercrystal is a mind-boggling substance used exclusively by Federated Technologies. While expensive and difficult to produce, this material is lightweight, extremely durable, and provides superior protection against conventional kinetic and energy weapons.

Hypercrystal is sourced from a parallel plane of existence discovered by Federated Technologies during testing of a proposed alternative form of FTL. This alternate plane features a higher number of dimensional axes than our own, which makes navigating and working within that space hazardous even to seasoned personnel.

This is the source of hypercrystal armor's strength: where conventional minerals such as quartz are extremely durable due to being bonded in equally along all three dimensional axes, hypercrystal is bonded equally in all direction along many more axes. Unfortunately, this also means that the hypercrystal needs to be "3D-stabilized" before it can safely enter a three-dimensional space.

Even when 3D-stabilized, hypercrystal has a shifting, iridescent appearance that makes it look vaguely otherworldly.

The process is very intensive, but the end result offers a number of advantages:

- It is lighter and less bulky than comparable armor made using metal matrix composites.
- It distributes the force of impact along far more molecular bonds, vastly increasing durability versus conventional kinetic weapons.
- It is likewise resistant to molecular disruption.
- It functions as a thermal and electric insulator, making it extremely resilient against conventional energy weapons.
- It is nonmetallic and thus non-magnetic, does not oxidize, and cannot be corroded.

However, this material is not without its downsides:

- It is difficult to source and labor-intensive to stabilize into a useful shape.
- While difficult to damage, the plating cannot be repaired in the field.
- Even when painted, this material retains a shifting, iridescent sheen that makes it impossible to disguise.
- While it can resist indirect magical spells such as fireball or acid stream, it provides no defense against mana spells that target the wearer directly.
- It likewise provides no explicit protection against more exotic weaponry such as gravitational weaponry.

OOC Notes

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