2024/05/15 08:45 1/3 Toledorium

Toledorium

A Quasicrystaline arrangement of existing Lorath armour materials (specifically, Titanium Boron Carbide), Toledorium is designed to distribute kinetic force when struck - making it especially difficult to break through kinetic means.

This is mostly thanks to a lack of any break in crystalline grain in Toledorium. To explain further, the lack of grain means stress cannot accumiulate over a single point (since structures usually fracture along changes in grain, with materials with less grain being much harder) - thus meaning any strike is distributed evenly across the whole component - released as vibrations, photons or heat - refusing to break nuclear bonds under heat, electromagnetic or kinetic stress.

Problems

Unfortunately, under overwhelming fire, the vibrations, internally released electromagnetic disruption from the photons and heat seriously risk damaging components - meaning whatever design employes Toledorium MUST compensate if it is used extensively (which is already expensive) making excessive use of the material as an outer armour material impractical and expensive.

Additionally, in testing it was quite common for mounting points holding plates in place to be destroyed before the plate was - meaning any mounting would need to be highly redundant and regenerative - which again, leads to soaring costs.

Toledorium sub-grades

Toledorium comes in three flavors, usually, Toledorium is named as Toledorium-A, Toledorium-B, Toledorium-C, Toledorium-S, etc. Generally grading schema reflects the durability (and cost) of the material.

Grade F

Flakes of material, usually scavenged from damaged armour or the 'flash' remains when producing Toledorium. An excellent thermal insulator but needs to be suspended in a gel substrate or paint.

Armor Properties Information

• Cost: Low

• Armor Type: Light Armor

Grade C

A high density exterior and low density interior – which tends to vibrate excessively but is very cheap and light (ideal for interiors on smaller lighter units).

Armor Properties Information

• Cost: Low

Last update: 2023/12/20 18:20

• Armor Type: Light Armor

Grade B

A high density interior and low density exterior – which tends to release photons when struck, interfering with nearby equipment – but is much harder than Grade C armour - best used on exteriors (for structol to grapple with). It can be hard to repair.

Armor Properties Information

• Cost: Medium

• Armor Type: Medium

Grade A

A single density Toledorium material. While extremely tough, it is much heavier than grades B or C. Takes much more material but takes less time to produce and less time to repair.

Armor Properties Information

• Cost: Medium

• Armor Type: Heavy

Grade S

A material of specially designed bespoke density, usually used in high-end equipment. Gets very hot when struck repeatedly. Very expensive to produce. Very expensive to repair without proper equipment.

Armor Properties Information

• Cost: Expensive

• **Armor Type:** Heavy

https://wiki.stararmy.com/ Printed on 2024/05/15 08:45

2024/05/15 08:45 3/3 Toledorium

Armor Modifier Notes

Armor Modifiers

Various armor types can modify SPs and STL Speeds (See also: Starship Speed Standard).

Armor Type	SP Modifier	Spd Bonus	Spd Max
No armor at all	0.4	+.075c	.45c
Light Armor	0.6	+.05c STL	.425c
Medium	0.8	+.025c	.40c
Heavy	1.0	None	.375c

From:

https://wiki.stararmy.com/ - STAR ARMY

Permanent link:

https://wiki.stararmy.com/doku.php?id=materials:toledorium

Last update: 2023/12/20 18:20

