

Can nerdist, if we
assume his lightsaber



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Can a lightsaber slice through adamantium? This argument is popular because Wolverine's indestructible claws, and the lightsabers from Star Wars are some of the most recognizable, and most liked weapons in pop culture. These are also weapons of extremes. Lightsabers could cut through almost anything and Wolverine's claws can only be cut by adamantium. To put these weapons against each other, we need to make their abilities more analyzable levels and less super or we learn nothing.

So the lightsaber can't be just a laser sword as George Lucas often calls it. It needs to be something to transmit heat effectively, so for this comparison we will have it is plasma. It also needs to have a reasonable amount of heat, like tens of thousands of degrees like a plasma cutter that we use in machining or a lightning bolt. To make adamantium more analyzable, we have to recognize there is no metal that can be liquid once. In X-Men 2 William Stryker said that adamantium is liquid at 1500 degrees Fahrenheit. So that is the melting point we will use. This now looks unfair, but a lightsaber can be nerfed by thermodynamics and adamantium could have a very high specific heat capacity.

Specific heat capacity is the amount of energy required to raise one gram of something one degree. Just how much energy the atoms can store depends on the atoms themselves and the interactions between them. This is specific heat capacity. Adamantium could have a high specific heat capacity by storing energy that is uncommon to metals such as rotation or translation. Then it would take a lot of heat to raise it to that melting point. It may not be possible for a lightsaber to transfer the heat fast enough to harm it. An example is when Randall Munroe of xkcd calculated that a bullet passing

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through a lightning bolt would not disintegrate because all the heat energy was not transferred fast enough.

But to truly get the amount of energy a lightsaber produces need to have a power rating for a lightsaber. The best example is when Qui Gon Jinn plunges his lightsaber through the blast door in the phantom menace. He melts a lightsaber's worth of material. According to Nerdist, if we assume his lightsaber is 1 meter long and 3 cm wide and the door is steel, and the blast door has the melting point, density and specific heat capacity of traditional steel we use in blast doors, we get the power output of 4 megawatts. Enough power to power a thousand homes. But is that enough for adamantium? If a lightsaber needs to get through a lightsaber's width of three claws and the mass needed to get through is a fraction of the 105 pound adamantium skeleton and it has a specific heat capacity higher than any other metal and the melting point is 1500 degrees but starts at room temperature and the contact time is only a tenth of a second because it is a quick swipe, it would take According to Nerdist, 35 megawatts. This means that during a slash the claws would be fine and the lightsaber would do no damage. Even if you bring the specific heat capacity down to reasonable levels there is still not enough power to melt through that fast.

However, if you change the contact time to just one second just like the classic locked blade scenario in Star Wars, then the lightsaber would go through it. This means that the result would come down to the battle itself. It ultimately comes down to which hero would use their weapon more effectively. Works Cited" Adamantium." Marvel Database, marvel.

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