

Conditioning Guideline

Ultrasint® PA6 Types

PA6 is a very well-known material in the industry and widely used, for example in the automotive sector. A common post-processing step in the injection molding industry is conditioning. To support you in your 3D-printing projects with our Ultrasint® PA6 types, this guideline summarizes all you need to know about this post-processing step.

Q: What happens during the conditioning process?

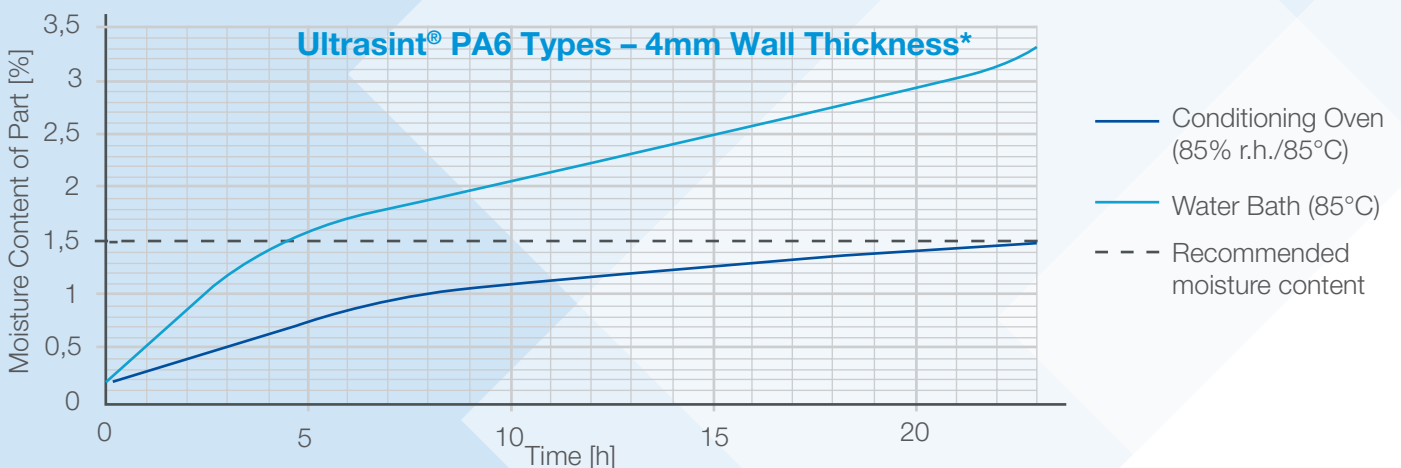
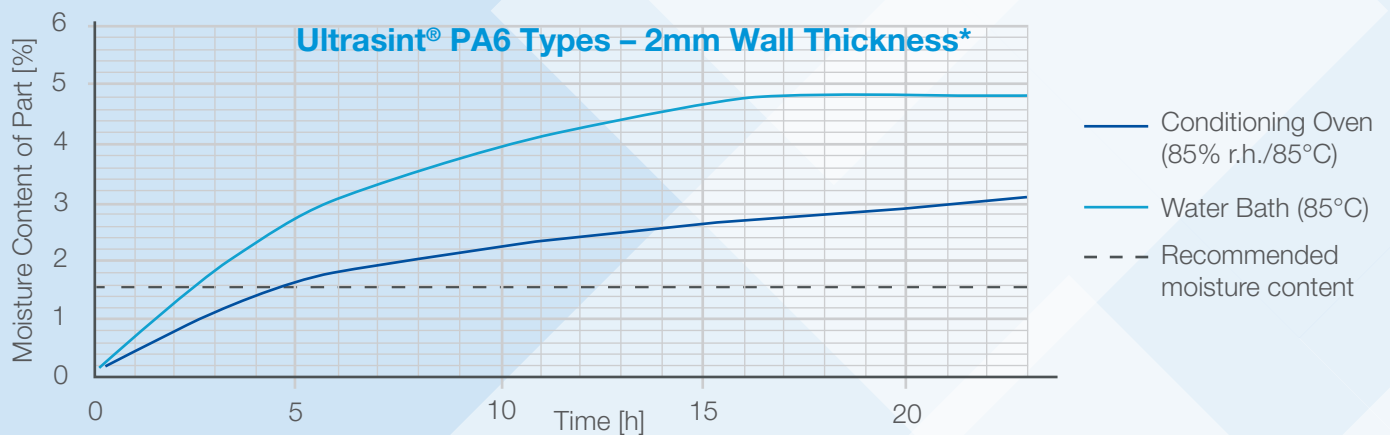
A: Conditioning increases the water content in the 3-D printed part by placing it in humid atmosphere, depending on the conditioning parameters and the geometry of the part. This leads to a change in mechanical properties. When kept under normal atmosphere after the conditioning, the part will reach an equilibrium state of moisture.

Q: Why do we recommend conditioning?

A: Parts printed with all PA6 types have to be handled with more care compared to PA12. We recommend to condition parts to reduce the risk of damaging fragile parts during use and transport.

Q: How do I condition my printed parts?

A: There are two ways to condition printed parts: by using a water bath or a conditioning oven. The advantage of the conditioning oven is the possibility to precisely control the humidity and temperature. The water bath conditions the parts quicker – however, there is a possibility of slight color change of the part.



*DISCLAIMER: These tables are just for your orientation. The actual moisture content of the part can vary due to different processing, material composition and preexposure to atmosphere.