



**Protoplast® is a new generation of plastic with unique properties.**

This material is mouldable at 60 degrees Centigrade, and functions like a hotmelt at higher temperatures. In other words, when you heat up Protoplast using for instance hot water you can shape it in any shape you want.

At room temperature Protoplast® is a white opaque plastic that's way stronger and tougher then for instance polyethylene. It's a true Thermoplast that you can heat and reshape over and over again.

**Small warning:**

Protoplast is safe to mould using your hands at about 60°C. At higher temperatures Protoplast® starts to function more like hot glue. at these temperatures it's advised not to use your hands for moulding but to use tools instead, using your hands at these temperatures may cause burns.

Protoplast used beneath 60°C won't adhere to metals. if you do want it to adhere to metals you'll have to work on a higher temperature it also helps to pre-heat the metal.

The safest way to heat up Protoplast is using Hot water kept at about 60°C using a food thermometer.

The plastic is in it's mouldable state when the gauntlets become transparent. when it becomes fully transparent it's ready to be taken out of the hot water. to do this you can use a spoon or another tool then carefully remove any surplus of water using your hands.

**Moulding using Protoplast®**

You can easily make sheets or cylinders of Protoplast using the following simple methods.

To make a sheet of Protoplast place you heated (and thus mouldable) mass on a flat surface (preferably slightly pre heated but not hot) and use two supports and a roller to flatten it out.

A cylinder is easy to make by Placing a lump of Protoplast between two rollers of the desired diameter and rolling it between two fat suffices. pro-tip: if you use two hot glue sticks as rollers you get Protoplast sticks for in a hot glue gun.

Of course you can always model it by hand to make all kinds of custom shapes, custom tool handles for instance.



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