

# CLEANING POLYCARBONATE MOULDS

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- Is the detergent compatible with polycarbonate and in which doses?
- Is the rinse aid compatible with polycarbonate and in which doses?
- Water quality (demineralisation)
- Max temperature during the cleaning 60°C
- Max temperature during drying 70-80°C
- Cleaning the washing machine regularly
- Any product residue to removed as much possible before washing (to not overload your washing machine).
- Have system checked regularly by manufacturer
- Maintenance the system often according to instructions by manufacturer

By taking good care during the cleaning process of your moulds, you can lengthen their lifespan and guarantee a better final product.

Moulds can be washed, using ordinary methods, with essentially good results. Polycarbonate moulds have a smooth, compact surface which is perfectly resistant to the regular washing methods.

However if the following rules are not observed, the moulds run a risk of creating cracks under stress and deposits of material on the surface. This results eventually in a decreased durability or in less visible consequences, such as swelling or deteriorating surface.

## 1. Washing

We recommend that your washing system is regularly maintained and checked on any irregularities by the manufacturer. This is because cleanness is essential in the whole process. Any loose particles of any kind can, under high pressure, damage the polycarbonate during the cleaning process. Should you use a household dishwasher to clean your moulds, be careful not to add too much dishwasher detergent. Chocolate only leaves greasy but not very resistant stains.

Caustic detergents with a base reaction in water, should not be used. Perfect results can be attained by using warm water and a slightly acidic or alkaline detergent.

Temperature should remain around +/- 60°C at all times. We recommend regular checks during the cleaning process, because too high temperatures may result in hydrolytic deterioration, yet again causing the durability of the mould to decrease.

## 2. Rinsing

When the cleaning process is done, the moulds should be rinsed to remove any remaining detergent. If this is not done, a chemical reaction may occur during moulding due to residue residing on the surface of the mould. Demineralised water should be used to rinse the polycarbonate at a temperature of +/- 60°C. This is afterwards easily removed by using a hot air dryer.

Softened water usually has a hardness of 12°f – 35°f before being treated. Water with a higher hardness than 35°f, which is then softened can leave marks on the polycarbonate after washing. This damages the moulds themselves and can show on your product when moulding. Such marks should under no case be removed by any forms of machinery, because this can leave scratches on the mould.

## 3. Drying

The moulds should then be dried using a hot-air compressor at around 70°-80°C. Take care to also completely dry the back of the mould, since this might otherwise cause humidity to transfer on other moulds during storage. This may yet again leave marks upon your product.

## 4. Moulding

Our final advise would be, after the cleaning process, to do a preliminary moulding, to prepare the moulds again for production. This should restore some of the shine on your product. The full veneer of your product will come back over time with every single moulding.

