

# GENERAL WASHING AND CARE GUIDELINES FOR POLYCARBONATE MOLDS/TRAYS

The information provided here is only a guideline.

Detergent and rinse aids if used at all, should be:  
 Non-alkaline, Non-chlorinated, Non-tainting, Low foaming  
 PH value of washing agent should be close to pH 9.5-10.5  
 PH-value of rinsing agent should be below pH 7

**Please note:** Many manufacturers do not use detergents or rinse aids at all. Some proprietary cleaning products may contain chemical constituents which can attack polycarbonate. We recommend that you carry out tests to check a solution's compatibility with polycarbonate and ask your rinse aid and detergent supplier (such as Eco lab) to demonstrate compatibility.

## MOLD DRYING

The mold should be dried completely by air stream – maximum mold surface temperature is 60 °C; All detergent remains must be washed off.

## WASHING NOTES

Water has a hydrolytic effect on polycarbonate causing polymer degradation. This effect is time and temperature dependent. Higher temperatures will cause a quicker degradation of the polymer. Increasing pH values will also accelerate the polymer degradation. . With temperatures up to 50 degree C the hydrolytic effect is slow. With temperatures above 50 degree C the hydrolysis degradation accelerates.

We recommend limiting the wash temperature on the mold surface to a maximum of 60 Degrees C (140F). Incorrect washing procedures can cause severe damage, mold breakage, mold surface degradation, fading gloss, increased spotting and de-molding problems can result from improper washing procedures.

## **WASHING GUIDELINES IF USING DETERGENTS OR RINSE AIDS**

<b>Wash Type</b>	<b>Recommended Temperature</b>	<b>Water Type</b>	<b>Contact Time</b>	<b>Detergent</b>
Pre Wash Heavily soiled Moulds	60° C	Soft Water	10 seconds	None
Main Wash	60° C Max	Soft Water	15 seconds	Detergent in tank
Re-circulating Rinse	60° C Max	Soft Water	10 seconds	No detergent or rinse aid
Final Rinse	55° C Max	Soft Water	Minimum	Rinse aid in water

**Please Note:** This information supersedes any previous information supplied. Previous lists of detergents and rinse aids which were known at the time to be compatible with polycarbonate have had some ingredient changes, which causes them to be incompatible with polycarbonate.