



# Injection Moulding Instructions Moulding through a Hot Runner (**Comprehensive (M) Version**)

P	age
Grade Selection	1
Removing Colour/Material Colour changes through a screw, barrel	2
Hot Runner Colour Change Mixing with next material	3
Safety Information General Safety Information, refer to Health and Safety Document for full information	4

### **Grade Selection**

Product	Instructions	Materials
Poly Clear Prime 100	- Basic	- Polyolefins, TPU's*, TPE's*
	- Comprehensive (M)	<ul> <li>Polyolefins, TPU's*, TPE's*</li> </ul>
	- Comprehensive (O)	- POM, PA's*, PBT*, PPO*
	- Decarbonisation	- Polyolefins, TPU's*, TPE's*, POM*, PA's*
Poly Clear Prime HMEX	- Comprehensive (M)	- Antistatic (ESD) Polyolefins, PE100, PE80
	- Comprehensive (O)	- POM, PA's*, low mfi Polyolefins
	- Decarbonisation	- Polyolefins, POM, PA's*, PBT*, PPO*
Poly Clear Prime CFT	- Basic	- ABS, SAN, Polyolefins
	- Comprehensive (M)	- ABS, SAN, Polyolefins
Poly Clear Prime CHMEX	- Basic	- HIPS, GPPS
	- Comprehensive (M)	- HIPS, GPPS

\*May require re-flushing with commodity polymer due to hydrolysis nature of next material.

Aquapurge products are not intended to be incorporated in finished plastic goods. In the view of the many factors that may affect processing and application, users should make their own independent determination that the products are suitable for their intended use and can be used safely and legally.



e: enquiries@aquapurge.com www.aquapurge.com Co. Reg. No. 03463169 VAT No. GB 627332547 EORI No





## Colour Change Instructions Moulding through a HR

Information Gathering (A - B)

- A) Take note of current Peak Injection Pressure (**PIP**)
- B) Increase PIP Limit to maximum

Cleaning Screw and Barrel (C - F)

- C) Empty Machine of last material
- D) Increase Back Pressure to Maximum and purge till white
- E) Dose 1 kg per 100 Tonne of Machine (i.e. 500 Tonne = 5 kg)
- F) Once clear, decrease back pressure to running conditions, stop feeding **Poly Clear Prime** and screw back and inject till completely empty.

Cleaning Hot Runner (H - K)

- G) Determine if your hot runner is a valve gate or open gate type.
  - <u>Valve Gate</u>: mix **Poly Clear Prime** at 40% with your next material at 60%
  - <u>Open Gate</u>: mix the **Poly Clear Prime** between 10% and 40% with the next material, so that when moulding, PIP increases by 30%
  - <u>Sequential Gate</u>: as per Valve Gate but also set all gates to open all at once.

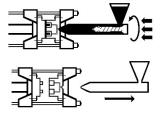






H) Add Poly Clear Prime mix to the clean hopper





- If standard practise, you may enhance cleaning performance by increasing Tip and Manifold heats by up to 50°C (max 280°C)
- J) Continue moulding until all colour has been removed
- K) Retract injection unit and completely empty of **Poly Clear Prime**

#### Cleaning Screw & Barrel (I - L)

L) Follow Cleaning Screw and Barrel procedures C – F with the NEXT MATERIAL.

Cleaning Hot Runner (M)

M) Start moulding with next material, ensuring all **Poly Clear Prime** is removed BEFORE reducing Tip and Manifold temperatures or splitting tool for tip (cap) removal.







### **Safety Precautions**

Do not use **Poly Clear Prime** for material with processing temperatures below 160° C



# Do not use **Poly Clear Prime** for material with processing temperatures above 290° C



Wear suitable protective clothing when cleaning down equipment, using, handling or viewing the hot or cold **Poly Clear Prime** 



If contact with skin occurs, wash with cool water

In case of eye contact, irrigate with plenty of cool water



\*

Do not swallow product



In situations of excessive shear heat place purgings in cool water to eliminate fumes

