



# Shrinkage of KEPITAL F20-03 by thickness & annealing

KEP Americas



**KEP**

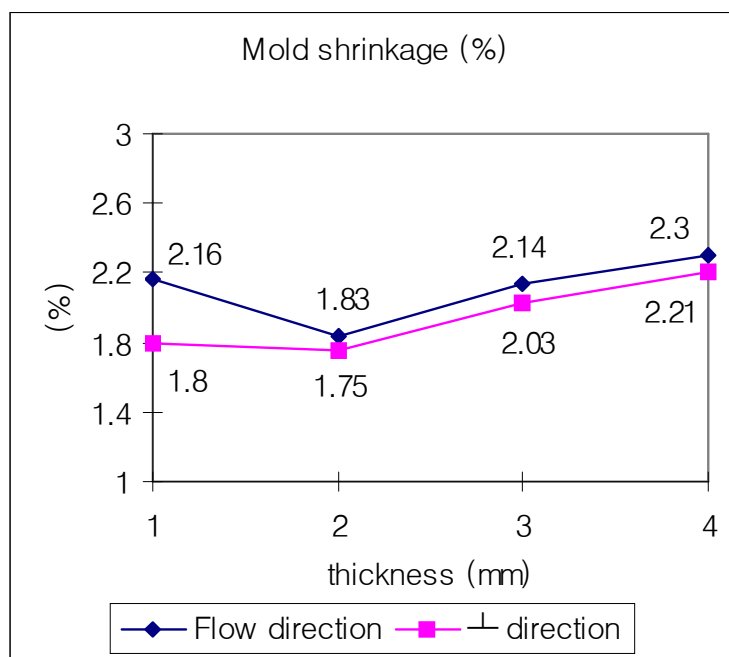
## Molding condition

- 1) Test mold : 100mm $\phi$  roundness mold
- 2) Mold thermal controller :  
 - carrier(water), HP(1.0), 131 $\ell$ /min, Output pressure(6~7kg/cm<sup>2</sup>)
- 3) Test condition

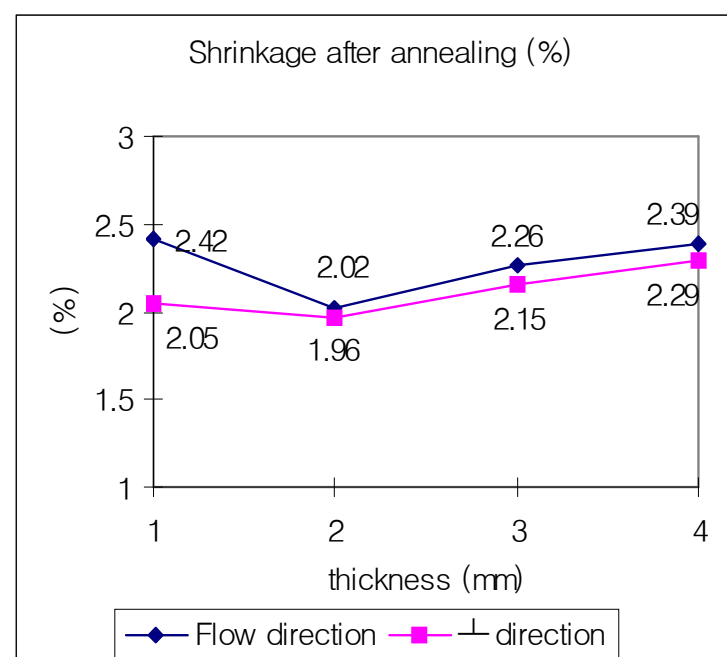
Items	Unit	wall thickness			
		1mmt	2mmt	3mmt	4mmt
Melt temp.	°C	190	190	190	190
Mold temp.	°C	80	80	80	80
Hold pressure	kgf/cm <sup>2</sup>	572	572	572	572
Hold time	sec	6	14	20	30
Injection speed	mm/sec	54	27	27	27
Cooling time	sec	10	10	10	10

- 4) Test method
  - Mold shrinkage: Measured just after seasoning at 23°C, 50%RH, 24hrs
  - Annealing shrinkage: After seasoning for 24 hrs, heating at 80 C for 300 hrs  
 n UL spec. oven.

# Mold shrinkage & shrinkage after annealing

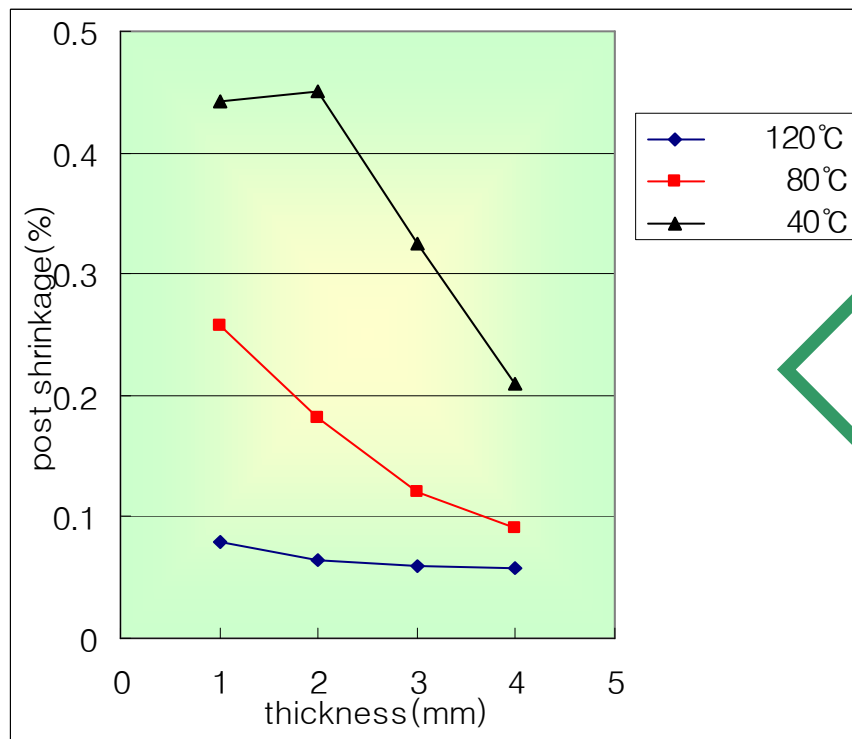


Mold temperature → 80 °C



Annealing condition  
80 °C x 300 hrs in air

## Post shrinkage rate after annealing



1. After annealing dimension changes
2. The shrinkage changes by thickness of the specimen (round shape).
3. In case that annealing temperature is far greater than mold temperature such as 120 C, the specimen does not change regardless of a thickness.



# Thank You !

**KEP Americas** 106 N. Denton Tap Rd, Suite 210-202, Coppell, TX 75019  
Technical: 201-941-2848, HQ: 972-745-7300, Customer service: 888-kepital

[www.kepital.com](http://www.kepital.com)

**KEP Americas**



*Disclaimer: The information contained herein is based on our current knowledge and experience for above product, made by Korea Engineering Plastics Co., Ltd. ("KEP") as delivered in the original package. This information should not be construed as a promise or guarantee of specific properties of this product described or its suitability to their purpose prior to use this product. It is sole responsibility of the users to investigate whether any existing patents are infringed by the use of this product. This product is not intended for use either in medical or a dental implant. Users should meet all safety and health standards. Any intellectual property rights are observed.*