Flame Retardant ABS, POLYLAC® PA-763

Processing Conditions

A. Pre-drying  80 ~ 85 °C x 2 ~ 4 hrs
depending on  a) Humidity
b) Ratio of reground resin
c) Storage conditions

B. Barrel Setting Profile

MAX(°C) 220 220 210
MIN(°C) 190 190 180

C. Mold Temperature  40~70 °C
depending on  a) Thickness
b) Dimension
c) Gate and runner system

D. Injection Pressure  50~80 %
Holding Pressure  20~50 %
Back Pressure  5~10 kg/cm²

E. Injection Speed: Slow to moderate fill speeds are recommended

F. Cushion Zone: approximately 1/8” after injection to provide good dimension consistency

G. Machine Downtime

For any normal machine shutdown or if mechanical problems require that POLYLAC PA-763 remain in molding machine for as long as 30 minutes, lower the barrel, nozzle and melt temperature to around 95 °C to prevent thermal degradation. When ready to resume operations, increase temperature setting to required level, purge the barrel, check melt with pyrometer and continue normal operations.

For prolonged shutdown or storage, molds should be cleaned and coated with a neutralizer and dehydrator containing a rust inhibitor.
Purging operations should be done with the safety shield in the down position to cover the barrel end and nozzle to contain possible splatter.

Purging for shutdown should include complete removal of PA-763 resin with either general purpose ABS or SAN. Reduce temperature settings to the temperature below 170°C and continue to purge until indicators show a reduction, then follow normal shutdown procedures.

After purging, the screw should be left in the forward position until ready for heat-up to start the next job.

**Mold Build-Up**

Mold build-up is a characteristic common to many types of the thermoplastics, including Flame Retardant POLYLAC ABS. Proper processing conditions can minimize this occurrence. Various type of mold cleaning agents are available; consult your local CHI MEI agent for recommendation. Molds need to be inspected frequently for evidence of build-up or vent clogging which may affect cosmetic appearance.

**NOTE :**
1. Keep the resin from dust and contamination during handling and production.
2. Do not retain the hot melt at the barrel for a long time between injection cycles.
3. Temperature setting of manifold system should not exceed 220°C to avoid melt from degraded.