

BOOSTER PO

GENERAL OPERATING INSTRUCTIONS

IN BLOWN FILM PRODUCTION:

1. Dry blend 4% (by weight) BOOSTER PO into the film resin or adjust additive feeding mechanism for a 4% dosage rate.
2. Temperature settings should remain unchanged, as long as the temperature zone directly behind the hopper (first heated zone) is at least 210°C (410°F).
3. Start production under normal conditions for about 15-30 minutes, for the mix to be fully introduced into the system. Record amperage and die pressures.
4. After 15-30 minutes, take note of the following:
 - a. The power consumption of the extruder should be reduced (record change in amperage).
 - b. The pressures at the die should be reduced (record change in pressures).
5. At this point, **two options** are available:
 - 5.1 **Reduce film gauge while maintaining properties.**

Action:

 - Adjust bubble parameters to reduce film thickness by 10%
 - Test film sample for pertinent properties. Record changes vs. standard gauge film
 - If desired, adjust bubble parameters for optimum film properties
 - 5.2 **Increase film production rate.**

Action:

 - Increase screw RPM of extruder to obtain a 10% throughput increase
 - Increase settings of takeoff equipment as needed
 - Monitor die pressures
 - Continue this process until an "optimal improvement" in throughput has been obtained
6. If desired, reduce dosage of BOOSTER PO to 3% of base resin and evaluate performance; the additional data points will allow calculation of optimum cost/benefit conditions.

- Notes:
- Steps 5.1 and 5.2 can be performed in sequence, until a desired combination of enhanced film properties and extruder throughput is realized.
 - Film samples should be tested for printability. Improved retention of aqueous inks can be expected.
 - If post-consumer or post-industrial films are processed, note any improvement in dispersal of contaminants or immiscible fractions.