



692 North High Street, Suite 310, Columbus, Ohio 43215 (614) 464-2008

### Our “Cardinal Rules” check list for conducting a successful Injection Molding (IM) trial using Kostrate ® Edge

1. Allow ample time for the evaluation
2. Ensure sufficient sample material was provided for the evaluation
3. Ensure knowledgeable process engineer **attends the trial whenever possible**
4. Ideally you should begin any “evaluations” of Kostrate ® Edge with a clean machine, screw, barrel, etc for ideal results! When this is not possible; you should purge with low melt GPPS prior to introduction of Kostrate ® into the feed zone of the processing equipment. **So, complete purging of all foreign materials prior to molding the selected Kostrate ® Edge grade is a must.**
5. Have needle pyrometer available to ensure start up melt temperature (~ 390 F recommended) is correct adjusting there after has your processing staff recommends as they know their equipment best.
6. We recommend that the water temp for mold is 120F for the “A” side and 80F for the “B” side to start. And, once again, the melt for the IM Kostrate ® Edge grades should be between 390F – 440F, starting at 390 and then adjusted as experience suggests.
7. Make sure that the mold is highly polished as Kostrate ® Edge “clones the surface” of the mold. Any surface defects on mold will show as the clear rubber in our material mimic the surface; e.g. mars and scratches in the tool.
8. Have a bucket of **CLEAN** water available to drop part in to “quickly cool” and note clarity of the part which is **ONLY** considered **AFTER** molded part reaches room temperature.
9. Discuss the excellent “soft flow” characteristics of our Kostrate ® Edge. Therefore, let your customer know that our material thus requires lower **injection pressures** than PC and PET. **Kostrate ® Edge is an EXTREMELY “processing friendly” injection molding material!**
10. **Have both rigidity and impact modifier available whenever possible.** This allows the process engineer the flexibility, **very quickly at the press**, to adjust our impact/toughness or rigidity if need be. If sufficient impact performance is lacking, for example, the processor can modify by adding 5%<sup>^</sup> **Kostrate ® Edge High Rubber** (hand blending the impact modifier as you would a color master-batch) feed this into the throat/hopper and then re-test the new parts to note improved drop/impact performance, etc. Keeping in mind that Kostrate ® Edge can always be modified into a custom-tailored formulation to meet your specific QC requirements.
11. Hold a summary meeting with management and processing staff to discuss results and establish the next step in our action plan and timing moving forward.

**Have a successful molding trial and if you have any questions, please do not hesitate to call us!**