



# BEST PRACTICE

# PURGING COMPOUND SELECTION AND USE

Purging is a necessary evil that most molders will need to perform as part of the regular maintenance plan when machinery has resin build-up or there is a required materials color change. Purging compounds work in several different ways including chemical or mechanical cleaning. The purge process involves a high level of proficiency and skill to ensure removal of any unwanted resin from the barrel assembly. A proper purging program can help molders reduce downtime and lower scrap rates.

As an alternative to using a commercial purging compound (CPC), some molders will simply keep running resin through the machine until they achieve a clean barrel. Other molders will throw rice, saw dust, or even powder laundry detergent into their molding equipment to help push out excess resin. Consistently repeating these techniques at regular intervals may prove to remove most of the old resin from the machinery. Therefore, the cost of the CPC could be eliminated from the purge process. Unnecessary downtime and resin costs are two of a molder's biggest expenses. The amount of revenue lost and resin scrapped during the purge practice must be factored in when evaluating the overall cost of purging.

Often, the price of the purging compound itself is a small percentage of the total cost involved. An online purge cost calculator that tabulates all of the possible related expenses while performing a purge cleaning, is certainly a handy tool to have when evaluating product options and the actual cost of performing a particular purging technique.

**Below is a list of the most relevant questions to ask when selecting your commercial purging compound.**

1. Are you performing regularly scheduled maintenance purges, or more difficult color or resin changes? Maintenance purges implemented before a weekend shutdown can be handled with a light-duty formula, while difficult color changes may require a heavy-duty purge product that can break down and force the undesirable residue from the screw and barrel unit.
2. Do your molds have hot runners? If so, a specialty purge formulation designed to flow through and clean out those smaller channels should be considered.
3. If you are molding with particular resins such as Acetal or Delrin, you should be aware that this might result in the release of concentrated amounts of acidic vapors during the procedure. A purge compound that will counteract this from occurring may be needed.
4. Be certain to check the recommended operating temperatures for any purging compound. Resin with higher operating ranges like PET or some engineering grade resins may require using a purge formulation specifically designed to work at those elevated temperature levels.
5. Each purging compound has detailed use instructions. We suggest asking for factory support to ensure you are using the most applicable product in the most efficient way.

