Vi-Chem® CORPORATION

INJECTION MOLDING VINYLS

START-UP PROCEDURES

SAFETY NOTE: **Do Not Mix Vinyl With Acetal. These Polymers React Under Processing Conditions To Form Dangerous Gases**

1. Clean the hopper and feed section thoroughly.
2. If a high temperature material such as Nylon, ASS, Polypropylene, etc. is followed by a lower temperature material such as PVC, then the temperature on the heating chamber must be raised to the molding temperature of the previous material to insure removal of any high temperature material that may be hung-up on the cylinder or nozzle area.
3. Introduce a purging compound, such as High Molecular Weight Crystal Polystyrene, into the cylinder at an elevated temperature. Reduce the injection pressure and purge out the heating cylinder.
4. Shut oft the heat and let the cylinder and nozzle cool to 300°F before introducing PVC.
5. While waiting for the cylinder to cool, dry cycle the machine to test the mold for proper clamp, knock-out, water line connections, etc. Check the water connection by momentarily turning it on to check the mold for circulation, leaks, etc., so that once the PVC is moving through the cylinder, the operation will not be interrupted for machine or mold adjustment.
6. When temperatures are at 300°F, introduce the PVC into the hopper and air shoot until 100% PVC compound is exiting the nozzle. Adjust the heat until the proper temperature is reached for the particular type of compound and durometer being used (the harder the compound, the higher the temperature needed to insure proper molding). Stock temperature will normally range from 300°F to 360°F. Higher stock temperatures will cause premature degradation; lower temperatures will cause short shots, poor surfaces, etc. (Typical starting temperatures for flexible PVC are zone #1 - 330°F, Zone #2 340°F, Zone #3 - 350°F, nozzle - 325°F, and mold cooling - 120°F.)

SHUT-DOWN PROCEDURES

1. **Do not leave the machine unattended with the heat on during, or at the end of a production run.** The material can become overheated due to prolonged heat exposure.
2. Make sure there is enough purging compound at the press just prior to the end of the
3. production run.
4. Shut oft the heat and run the remaining few shots followed by a quick purge.
5. Clean out or shut oft the hopper and feed mechanism properly, then purge thoroughly.
6. Spray the mold with rust preventative to prevent possible corrosion and rusting.
7. If you have any questions, call Vi-Chem Corporation's Technical Service Department toll free at 1-800-477-8501.

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