

PET colour change

FAST COLOUR CHANGE WITH ULTRA PURGE PET-E PURGING COMPOUND

Purging a single stage injection blow PET machine can be tricky because moulding parts out of the purge is required.

Ultra Purge PET-E, when mixed with undried PET, is the perfect solution for moulding parts in this type of application. Recently a company manufacturing bottle preforms on a single stage Aoki PET machine approached Moulds Plus International for assistance with their colour changes. Dark to clear colour changes can take the moulder up to two hours before parts are free of contamination.

THE SOLUTION

The colour change with Ultra Purge took place on the fly resulting in a total downtime of 30 minutes.

In order to ensure the mouldability, Ultra Purge PET-E was mixed in a 35% ratio with 65% ratio of cold and undried PET.



Left - Dark green preform. **Middle** - Preform moulded out of Ultra Purge PET-E/PET mixture. **Right** - Clear preform.

Using Ultra Purge accounted for a 75% reduction in downtime and scrap. Along with pulling out the dark colour the Ultra Purge also removed degraded material that had built up in the manifold.

The moulder is now using Ultra Purge for all dark to light colour changes and expects to see a significant reduction in production costs.

Industry advantages:

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| Food & Packaging: | Approved by FDA & EU Food Requirements. |
| Medical: | Ultra Purge have passed the strict migration test to comply with EU food contact regulations. |
| Technical: | Specialized solution that works with a wide variety of resins and temperatures. |
| Electronics: | Suitable for high temperature applications. Very effective during material changes and with carbon buildup removal. |
| Housewares: | Colourants and carbon deposits are softened and easily removed from extruders, injection units and hot runners. |
| Automotive: | Fast and easy solution for dark to light colour changes. |

PRODUCT GUIDE

| Grades | Ultra Purge P-O | Ultra Purge PET-E | Ultra Purge BP | Ultra Purge 5150 | Ultra Purge 5160 | Ultra Purge PC | Ultra Purge PMMA | Ultra Purge HT+ |
|------------------|---|-------------------|---|---|--|-------------------------------------|--|--------------------------|
| Temp. °C | 170-300 | 190-320 | 170-380 | 160-350 | 190-320 | 220-340 | 200-280 | 250-400 |
| Resin Range | PP, PE, HDPE, LDPE, LLDPE, HIPS, GPPS, TPO... | PET | PP, PE, HDPE, LDPE, LLDPE, HIPS, GPPS, TPO... | ALL RESINS WITHIN ABOVE TEMPERATURE RANGE | ABS, ASA, PA, GPPS, HIPS, PC, SAN, PBT, PET... | WHEN SWITCHING FROM ANY RESIN TO PC | WHEN SWITCHING FROM ANY RESIN TO PMMA, TRANSPARENT PA, CA, CAB | PPS, PSU, PEEK, ULTEM... |
| Ready-to-use | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Concentrate | | | ✓ | | | | | |
| Hot runners | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| PET Preform | | ✓ | | | | | | |
| EXTRUSION | | | | | | | | |
| Screw & Die | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Blow Moulding | | | | ✓ | | | | |

For technical support please consult COMTEC IPE

It is recommended to consult the technical data sheet of each grade.

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