

December 4, 2020

Polystyvert Inc.
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Attn: Jean Mathieu Pin, PhD

Intertek 3rd Party Certification – Polystyvert’s Recycling Process

Executive Summary

Polystyvert has developed a unique dissolution technology for recycling polystyrene. Polystyrene (feedstock) is placed in contact with a solvent that dissolves the polystyrene and is reused to recycle more material. The mixture of dissolved polystyrene and solvent is then purified to attain a high level of purity for the next step: the separation of polystyrene from solvent. The final recycled product is pelletized, while the solvent is also recycled for the next dissolution cycle.

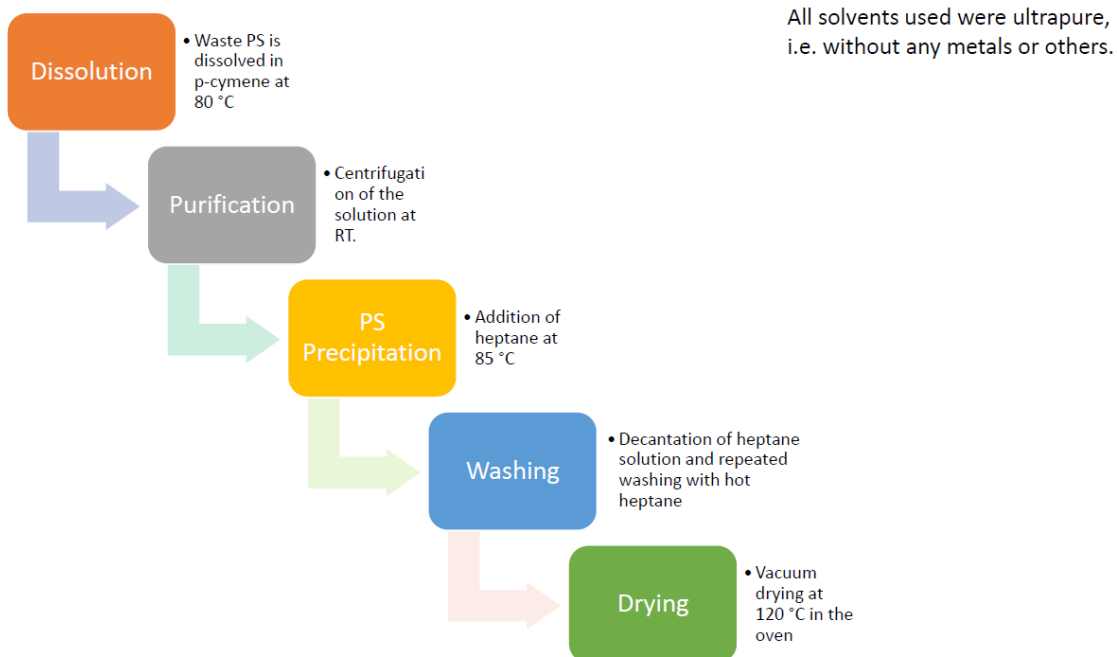


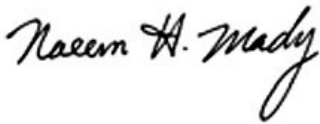
Figure 1 Diagram - Polystyvert Recycling Process

Analytical Testing overview

Intertek conducted volatiles screening (via GC/MS) and Metals Screening (via ICP) on the feedstock and final (recycled) product samples (*ref: test reports: 130982v1, 128664v1*). The test reports confirm that the process effectively removes the majority of contamination originally identified in the feedstock, which is sourced from both post-industrial and post-consumer sources. Both the post-industrial and post-consumer are collected from fixed sources.

Conclusion

Based on Intertek's review of the feedstock, the recycling process, and the analytical data we have concluded that Polystyvert's proprietary recycling process is effective in removing the majority of contamination. Intertek recommends that quality control procedures be implemented by the users of this process to ensure the final food contact material is safe for the intended end-use.



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Appendices:

- Test Report 130982v1 (November 24, 2020)
- Test Report 128664v1 (January 21, 2020)