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## **THESIS SUMMARY**

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## Summary

In this thesis on purging compounds for extrusion, I emphasized the importance of using these compounds as part of regular maintenance and cleaning procedures for extrusion machinery. I began by discussing the challenges of cleaning extruder barrels, screws, and dies, which can become contaminated with residual resin, colorants, and other materials over time. This contamination can lead to degraded product quality, increased scrap rates, and costly downtime.

To address these issues, I explained that purging compounds are specially designed materials that can effectively remove residual contaminants from extruder components. These compounds typically contain a blend of polymer, abrasive, and other cleaning agents that can break down and remove contaminants.

I as well went on to discuss the benefits of using purging compounds, including reducing downtime and maintenance costs, improving product quality and consistency, and extending the life of the extruder. I also discussed the different types of purging compounds available, such as mechanical purging compounds, chemical purging compounds, and hybrid purging compounds.

Then I provided some practical tips on how to use purging compounds effectively. I emphasized the importance of following manufacturer recommendations for mixing and application, adjusting temperature and pressure settings to optimize cleaning performance, and purging regularly to prevent buildup and maintain cleanliness.

At the end of the thesis I put some result tests on which purging compound a manufacturer should use in order to optimize production efficiency and maintain the quality of the final product.

Overall, the thesis highlighted the critical role that purging compounds play in maintaining the performance and quality of extrusion machinery. By using these compounds as part of regular maintenance procedures, manufacturers can reduce downtime, improve product quality, and extend the life of their equipment.