

Project Information

Project Name	TTI Pro-Max 37 TPE and Princeton University TPE Thermal Stability Comparison				
Client Info	Target Technologies International Inc 8535 Eastlake Drive Burnaby BC V5A4T7		Sample Received	7/28/2023 (TTI PRO-MAX 37 TPE) 8/3/2023 (Princeton University TPE)	
Report Date	8/14/2023		Test Date	8/9/2023	
Report Status	Final		Job No.	98743/8926	
Prepared by		Megan Illsley Laboratory Director		Megan Allsley	
Checked by		Jeffrey Gentile Director of Operations		Moslic	

Notes

- 1. This report has been prepared by Firefly Sports Testing with all reasonable skill, care and diligence within the terms of the contract with the Client and within the limitations of the resources devoted to it.
- 2. This report is confidential to the Client and Firefly Sports Testing accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.
- 3. This report shall not be used for engineering or contractual purposes unless signed by the Author and the Checker and unless the report status is "Final."

Summary

Firefly Sports Testing was commissioned to perform infill thermal stability behavior testing. The purpose of this testing was to determine at which temperature the material will start to melt and agglomerate.

Procedure

A sample of infill material was prepared in a petri dish and placed in a Quincy 20AF Hydraulic forced air gravity convection oven to heat the material and an Omega HH147U Data logger to track temperature. The oven heat was increased by 5 °C increments and stabilized for 15 minutes at each interval until changes caused by the effect of the heat were observed.















Thermal Stability Results

Temperature (°C)	Temperature (°F)	TTI PRO-MAX 37 TPE Observations	TPE Infill Supplied by Princeton University Observations
70	158	No agglomeration noticed	No agglomeration noticed
75	167	No agglomeration noticed	No agglomeration noticed
80	176	No agglomeration noticed	No agglomeration noticed
85	185	No agglomeration noticed	No agglomeration noticed
90	194	No agglomeration noticed	No agglomeration noticed
95	203	No agglomeration noticed	No agglomeration noticed
100	212	No agglomeration noticed	No agglomeration noticed
105	221	No agglomeration noticed	No agglomeration noticed
110	230	Starting to stick together; does not feel tacky on paper	Starting to stick together; does not feel tacky on paper
115	239	Starting to stick together; does not feel tacky on paper	Starting to stick together; does not feel tacky on paper
120	248	Starting to stick together; does not feel tacky on paper	Starting to stick together; does not feel tacky on paper
125	257	Agglomeration noticed; testing stopped	Agglomeration noticed; testing stopped









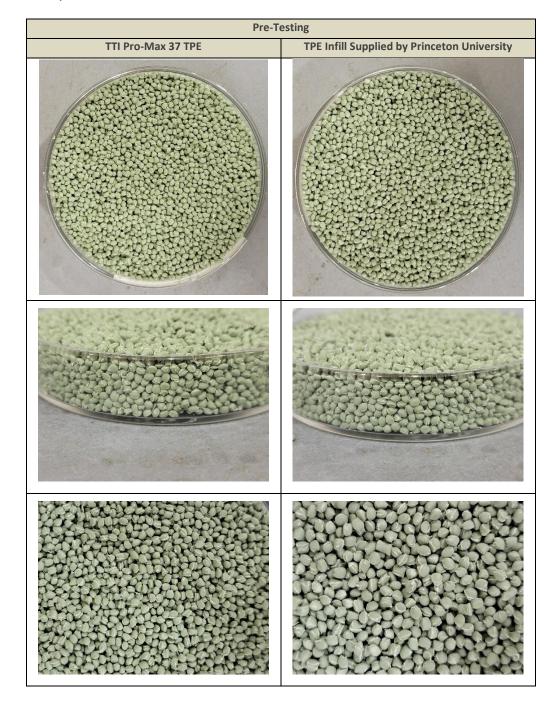








Sample Photos







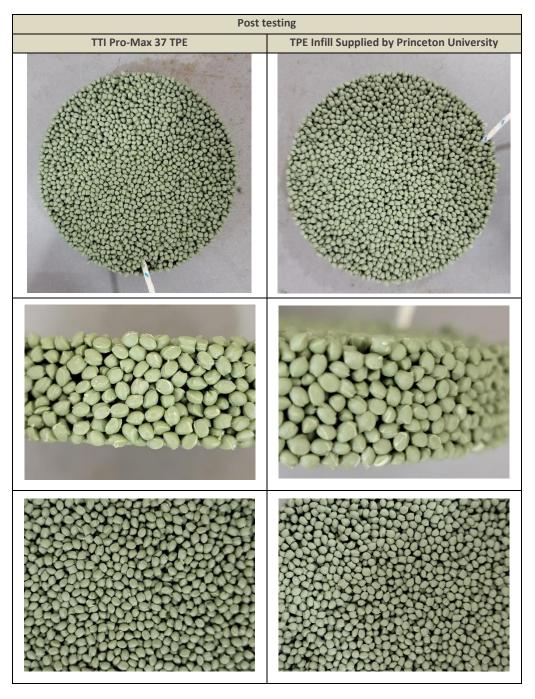












End of Report













