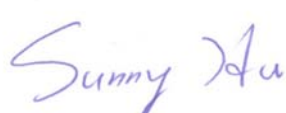


Prüfbericht - Nr.: 0114040833d 001 <i>Test Report No.:</i>		Seite 1 von 4 <i>Page 1 of 4</i>													
Auftraggeber: <i>Client:</i>		LIEN SHENG PLASTIC INDUSTRY CO., LTD No.111, Ln. 840, Sec. 1, Zhongzheng E. Rd., Dayuan Dist., Taoyuan City 33745, Taiwan, R.O.C.													
Gegenstand der Prüfung: BB pellet <i>Test Item:</i>															
Bezeichnung: <i>Identification:</i>		PLA 0.32g													
Anlieferungszustand: <i>Delivery condition:</i>		apparent good													
		Eingangsdatum: <i>Date of Receipt:</i>													
		2015-09-18													
Prüfört: <i>Testing location:</i>		Laboratories of TÜV Rheinland Taiwan													
Prüfgrundlage: <i>Test specification:</i>		Testing according to customers specification for the following parameter: Material analysis													
Prüfergebnis: <i>Test result:</i>		The test results are the measurements, stated in the test report.													
geprüft: tested by:  2015-10-07 Sunny Hu /Senior Specialist <table style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Datum</th> <th style="text-align: left; border-bottom: 1px solid black;">Name/Stellung</th> <th style="text-align: left; border-bottom: 1px solid black;">Unterschrift</th> </tr> <tr> <td style="font-size: small;">Date</td> <td style="font-size: small;">Name/Position</td> <td style="font-size: small;">Signature</td> </tr> </table> kontrolliert: checked by:  2015-10-07 Tammy Wang /Project Manager <table style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Datum</th> <th style="text-align: left; border-bottom: 1px solid black;">Name/Stellung</th> <th style="text-align: left; border-bottom: 1px solid black;">Unterschrift</th> </tr> <tr> <td style="font-size: small;">Date</td> <td style="font-size: small;">Name/Position</td> <td style="font-size: small;">Signature</td> </tr> </table>				Datum	Name/Stellung	Unterschrift	Date	Name/Position	Signature	Datum	Name/Stellung	Unterschrift	Date	Name/Position	Signature
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Date	Name/Position	Signature													
Sonstiges/ Other Aspects: Test period: 2015-09-18 – 2015-10-07															
<table style="width: 100%; font-size: small;"> <tr> <td style="width: 50%;"> Abkürzungen: ok / P = entspricht Prüfgrundlage fail / F = entspricht nicht Prüfgrundlage n.a. / N = nicht anwendbar </td> <td style="width: 50%;"> Abbreviations: ok / P = passed fail / F = failed n.a. / N = not applicable </td> </tr> </table>				Abkürzungen: ok / P = entspricht Prüfgrundlage fail / F = entspricht nicht Prüfgrundlage n.a. / N = nicht anwendbar	Abbreviations: ok / P = passed fail / F = failed n.a. / N = not applicable										
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Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>															



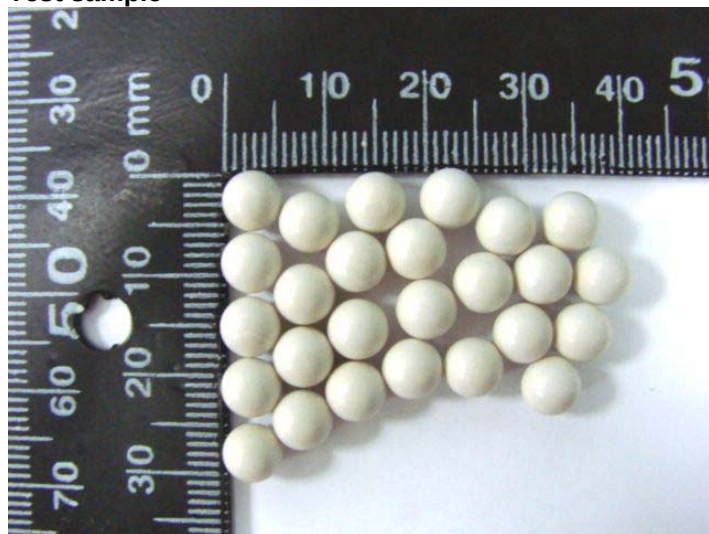
Test Report No. : 0114040833d 001
Customer : LIEN SHENG PLASTIC INDUSTRY CO., LTD

2015-10-07

Sample list:

Mat. No.	Lab no.	Product Name	Material	Color
1	TCL150918-11	PLA 0.32g	Plastic	White

Test sample



Remark:

1. Material Analysis
 - 1.1 Infrared rays analysis see attached spectrogram 1
 - 1.2 Differential Scanning Calorimeter see attached graph 2
 - 1.3 Thermogravimetric Analysis see attached graph 3
 - 1.4 Wavelength: $4000\text{ cm}^{-1} \sim 600\text{ cm}^{-1}$
2. Volatile Solids Content
 - 2.1 Sample Weight: 5.2763 g

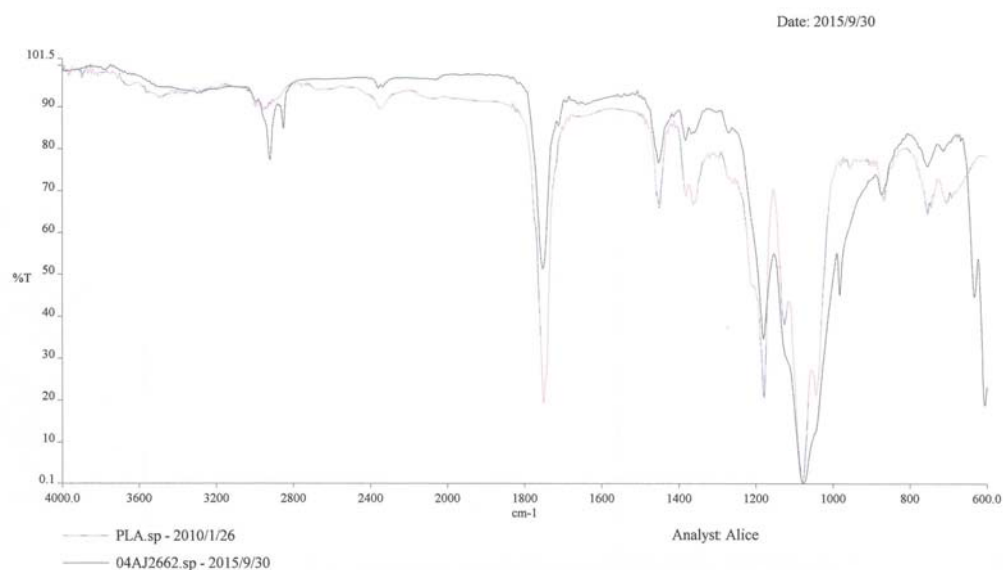
Test Report No. : 0114040833d 001
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2015-10-07

Sample/Material No.	1
Material Analysis SOP-C025-01*	The main material of the sample is determinate as PLA (Polylactic acid), with FTIR (Fourier transform infrared spectroscopy) and DSC (Differential Scanning Calorimeter) analysis. + 17.7 % BaSO ₄ Inorganic Filler Content: 1.8 % CaCO ₃ + 79.9 % BaSO ₄
Volatile Solids Content EN 13432	18.0 %

*the method has been certified by ISO/IEC 17025

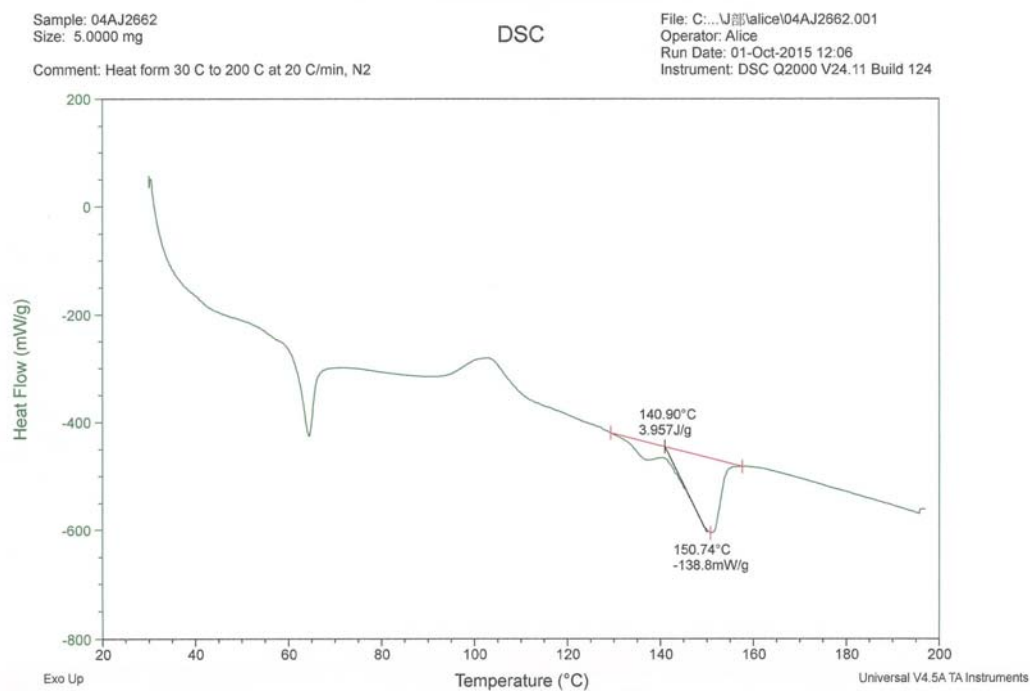
Attached spectrogram 1



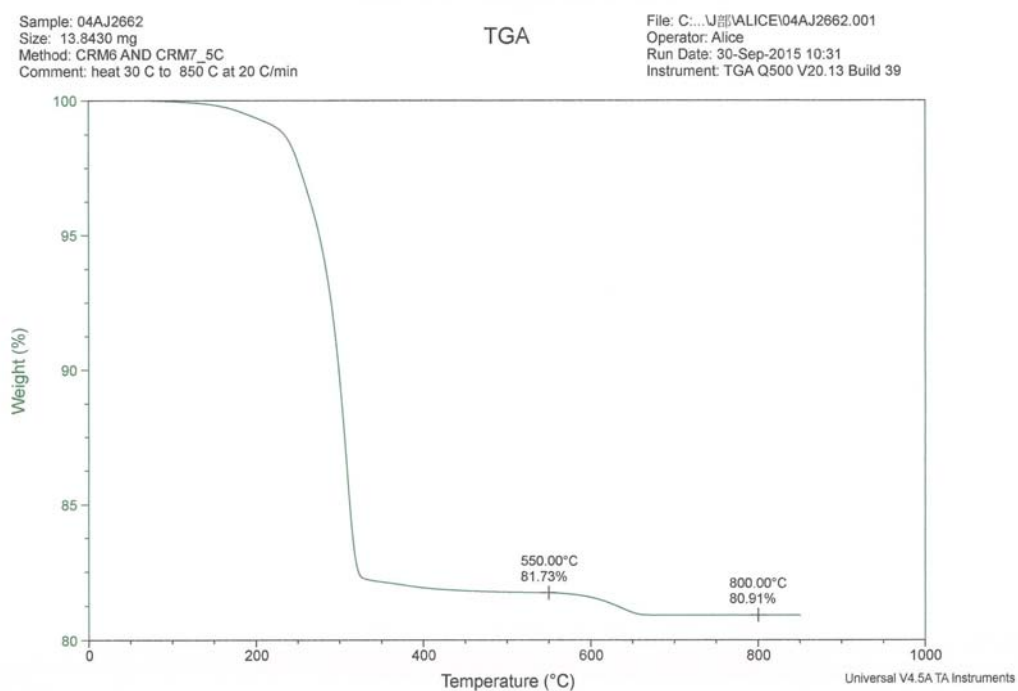
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2015-10-07

Attached graph 2



Attached graph 3



--- End of Test-Report ---