

We **LW** it.

分析_LUVOFILM 9901
CN 包装袋内发现丝状物

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雷孚斯集团 – The LEHVOSS Group

一、背景信息

材料名称: LUVOFILM 9901

批号: 231221074.

2024.1.14 日 客户反馈:

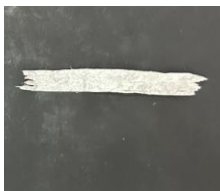
包装袋里有不明杂质 (批次231221074;



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二、内部分析

1) DSC 比对 “丝带异物”与正常粒子DSC测试曲线

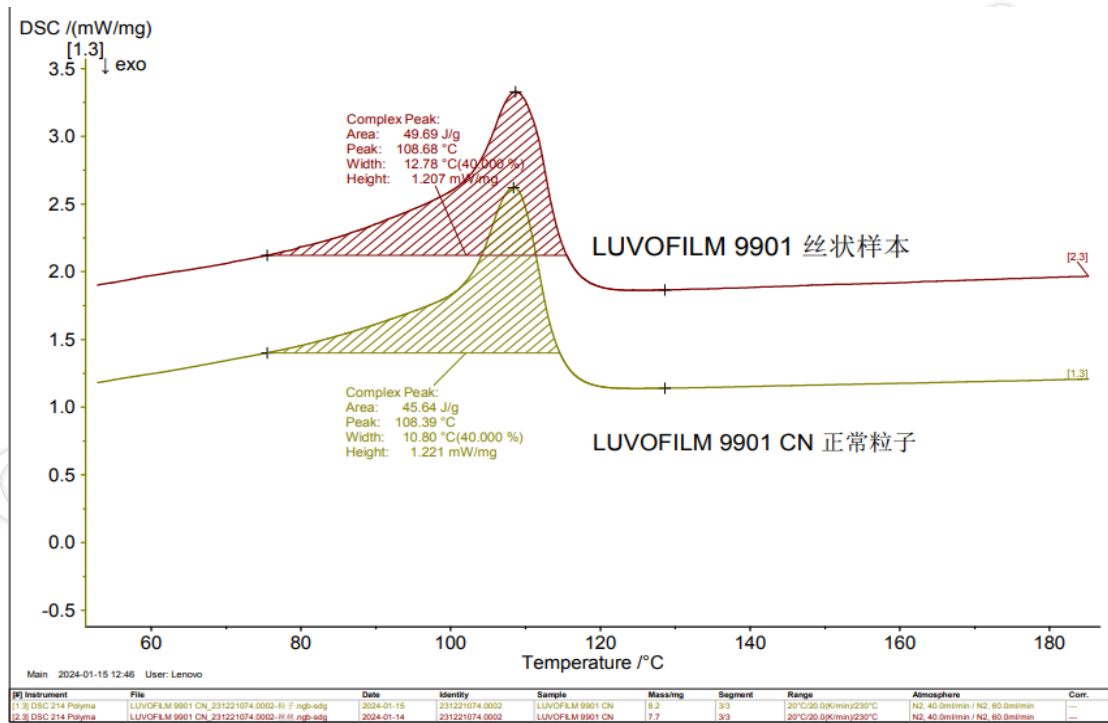


丝带样品



正常粒子

收集LUVOFILM 9901 CN材料中丝状样本与正常粒子样本做DSC分析比对，绿色曲线为正常粒子曲线，紫色为丝状材料样本测试曲线，测试结果曲线走向相同且特征峰一致。



二、内部分析

2) FTIR 比对 “丝带异物”与正常粒子红外图谱

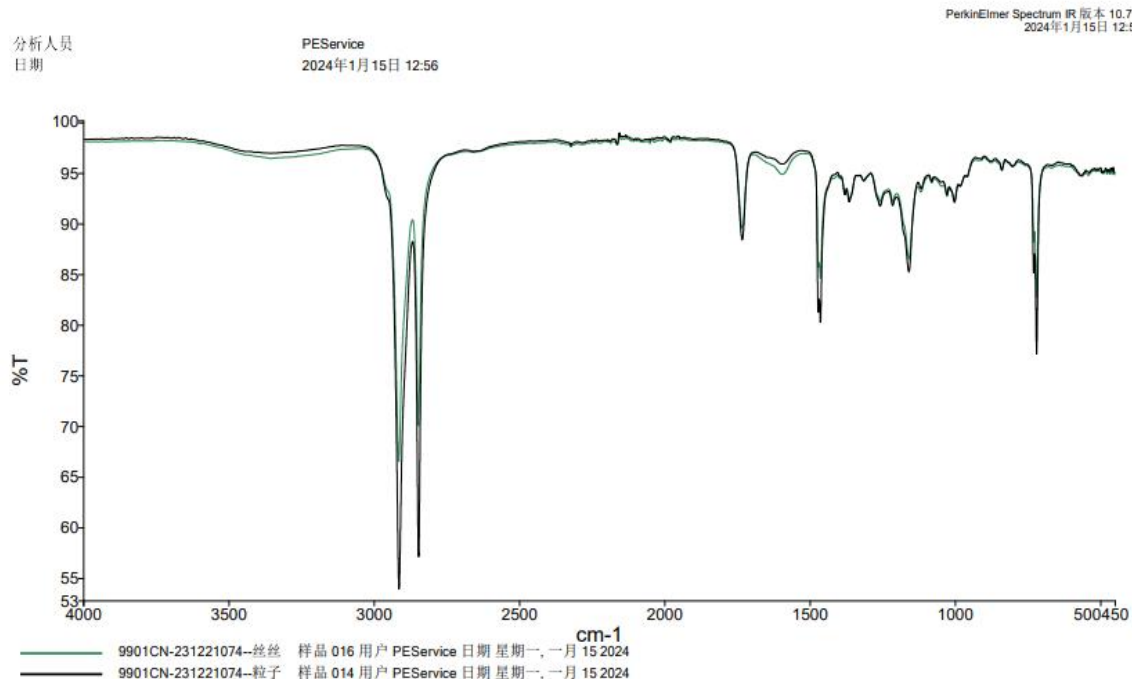


丝带样品



正常粒子

LUVOFILM材料中丝状样本与正常粒子样本做FTIR分析比对，绿色曲线为丝状样本曲线，黑色曲线为LUVOFILM 9901 CN正常粒子测试曲线，两个样品曲线走向相同且特征峰无差异。



三、产生原因

LUVOFILM 9901 CN材料在挤出造粒后真空输送至干燥桶这一过程中产生“丝状异物”；挤出机挤出后线条切粒后未完全冷却的粒子在管道输送过程中与管道内壁不断摩擦或撞击，摩擦或撞击点温度不断升高于PE熔点后粒子熔融，由点到面在输送管道内壁形成丝或膜状材料并粘附，成型后在后续粒子的撞击下脱落带入；

四、结论：

丝带样品跟正常粒子DSC&FTIR内部比对测试结果显示材料一样，丝带物质非异物而是LUVOFILM 9901 CN材料本身，对产品性能无任何影响；

五、改善措施

改善措施：

- 1、挤出机生产使用加长水槽冷却，延长挤出线材在水槽中的冷却时间，提高冷却效率；
- 2、包装前再次剔除丝带物；

Thanks for Listening



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