

Certificate of Analysis

Date of Testing: 2023-12-18 13:32:01

Date of Next Testing: 2027-12-17 13:32:01

Product Name: **Poly(3-decylthiophene-2,5-diyl)**

CAS Number: 110851-65-5

Specifications & Purity: M.W : 30000-100000

Lot #: L2311360

SKU # **P165923**

Analysis: **300703**

Storage Temperature: Argon charged

Parameter	Limit Values	Result
Carbon by Elemental Analysis	73.3-77.9 (%)	74.90 %
Sulfur by Elemental Analysis	14.0-14.8 (%)	14.30 %
Molecular Weight	30000-100000	42000.00
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Appearance (P165923)	Dark Brown Chunk(s)	Dark Brown Chunk(s)
Fluorescence : λ_{ex} 441 nm ; λ_{em} 567 nm in chloroform	Conforms	Conforms



John Su
QA & QC Manager