

Certificate of Analysis

Date of Testing: 2023-04-05 20:36:58

Date of Next Testing: 2027-04-04 20:36:58

Product Name: **Span 20**

CAS Number: 1338-39-2

Specifications & Purity: non-ionic

Lot #: C2331851

SKU #: **S102859**

Analysis: 159527

Parameter	Limit Values	Result
Water by Karl Fischer	0-1.5 (%)	1.03 %
Refractive index n ₂₀ /D	1.473-1.476	1.48
Acid Value	≤8 (mgKOH/g)	5.17 mgKOH/g
Heavy metals	0-0.001 (%)	0.00 %
Saponification value	160-175 (mgKOH/g)	161.53 mgKOH/g
Ignition Residue (as sulfate)	0-0.5 (%)	0.33 %
Hydroxy Value	330-360 (mgKOH/g)	333.45 mgKOH/g
Appearance (S102859)	Yellow to Yellow-Green Liquid	Yellow to Yellow-Green Liquid
Solubility in EtOH , Clear,no black insolubles	pass	Pass



John Su
QA & QC Manager