# Size Distribution Report by Intensity

V2.2



## Sample Details

Sample Name: 0.25wtPEO 1
SOP Name: mansettings.nano

**General Notes:** 

File Name: SU8.dts Dispersant Name: Cyclopentanone

 Record Number: 4
 Dispersant RI: 1.436

 Material RI: 1.48
 Viscosity (cP): 1.2900

Material Absorbtion: 0.043 Measurement Date and Time: martes, 11 de junio de 2019 ...

#### System

Temperature (°C): 25.0 Duration Used (s): 60

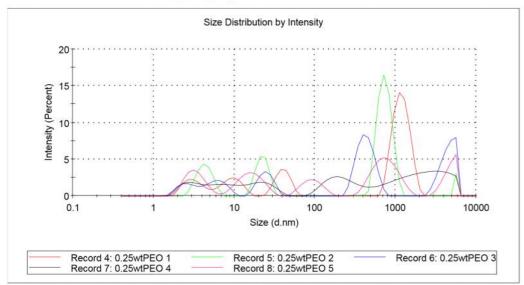
Count Rate (kcps): 366.9 Measurement Position (mm): 4.65

Cell Description: Glass cuvette with square aper... Attenuator: 9

# Results

Size (d.nm): % Intensity: St Dev (d.n... **Z-Average (d.nm): 233.3** Peak 1: 1189 60.8 276.7 Pdl: 0.955 Peak 2: 40.41 14.0 8.121 Intercept: 0.828 9.569 12.6 2.552 Peak 3:

Result quality: Refer to quality report



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Zetasizer Ver. 7.11 Serial Number : MAL1143312 File name: SU8.dts Record Number: 4 11 jun 2019 10:57:06 a.m.

# Size Distribution Report by Number

v2.2



**Sample Details** 

Sample Name: 0.25wtPEO 1
SOP Name: mansettings.nano

**General Notes:** 

File Name: SU8.dts Dispersant Name: Cyclopentanone

Record Number: 4 Dispersant RI: 1.436

Material RI: 1.48 Viscosity (cP): 1.2900

Material Absorbtion: 0.043 Measurement Date and Time: martes, 11 de junio de 2019 ...

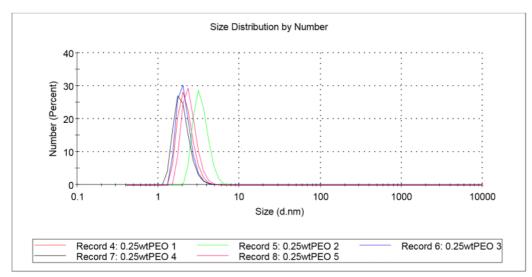
**System** 

Temperature (°C): 25.0 Duration Used (s): 60
Count Rate (kcps): 366.9 Measurement Position (mm): 4.65
Cell Description: Glass cuvette with square ... Attenuator: 9

Results

Size (d.nm): % Number: St Dev (d.n... 2.216 100.0 0.5437 Z-Average (d.nm): 233.3 Peak 1: **PdI:** 0.955 Peak 2: 0.000 0.0 0.000 Intercept: 0.828 Peak 3: 0.000 0.0 0.000

Result quality: Refer to quality report



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Zetasizer Ver. 7.11 Serial Number : MAL1143312 File name: SU8.dts Record Number: 4 11 jun 2019 10:57:07 a.m. martes, 11 de junio de 2019

10:57 a.m.

# **Size Quality Report**

v2.0



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**Sample Name:** 0.25wtPEO 1 **SOP Name:** mansettings.nano

**File Name:** SU8.dts **Record Number:** 4

Measurement Date and Time: martes, 11 de junio de 2019 10:48:10 a.m.

Temperature (°C): 25.0

#### RESULT DOES NOT MEET QUALITY CRITERIA

### Multimodal fit error high

- \* Data quality too poor for distribution analysis
- \* Sample too polydisperse for distribution analysis

#### Cumulant fit error high

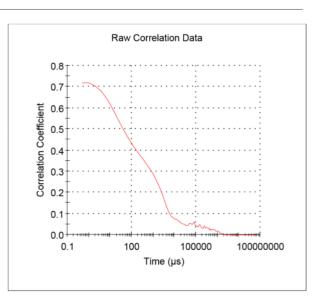
- \* Data quality too poor for cumulant analysis
- \* Sample too polydisperse for cumulant analysis

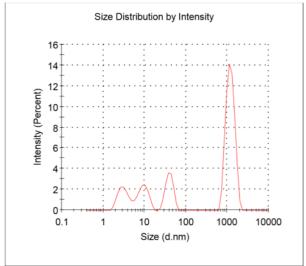
### In range figure is low (83%)

- \* Presence of large or sedimenting particles
- \* Sample fluorescence
- \* Sample absorbance (coloured samples)

## Polydispersity index is very high (.955)

- \* Sample is very polydisperse and may not be suitable for DLS measurements
- \* Sample contains large
- particles/aggregates/dust
  - \* Wrong measurement position selected





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Zetasizer Ver. 7.11 Serial Number: MAL1143312 File name: SU8.dts Record Number: 4 11 jun 2019 10:57:07 a.m.

# Size Distribution Report by Volume

v2.2



#### Sample Details

Sample Name: 0.25wtPEO 1
SOP Name: mansettings.nano

**General Notes:** 

File Name: SU8.dts Dispersant Name: Cyclopentanone

Record Number: 4 Dispersant RI: 1.436

Material RI: 1.48 Viscosity (cP): 1.2900

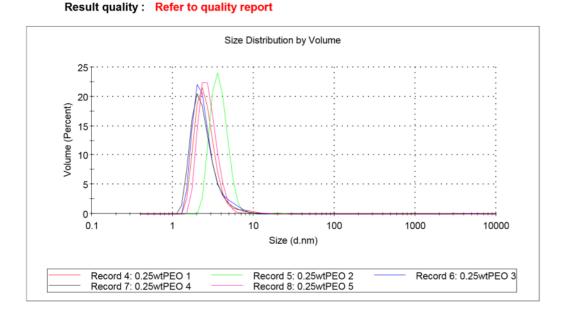
Material Absorbtion: 0.043 Measurement Date and Time: martes, 11 de junio de 2019 ...

#### System

Temperature (°C): 25.0 Duration Used (s): 60
Count Rate (kcps): 366.9 Measurement Position (mm): 4.65
Cell Description: Glass cuvette with square ap... Attenuator: 9

#### Results

Size (d.nm): % Volume: St Dev (d.nm): 2.756 99.9 1.282 **Z-Average (d.nm): 233.3** Peak 1: **Pdl:** 0.955 Peak 2: 36.13 0.0 8.337 0.1 325.6 1224 Intercept: 0.828 Peak 3:



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Zetasizer Ver. 7.11 Serial Number : MAL1143312 File name: SU8.dts Record Number: 4 11 jun 2019 10:57:08 a.m.