

## Technical Specifications Datasheet (TDS)

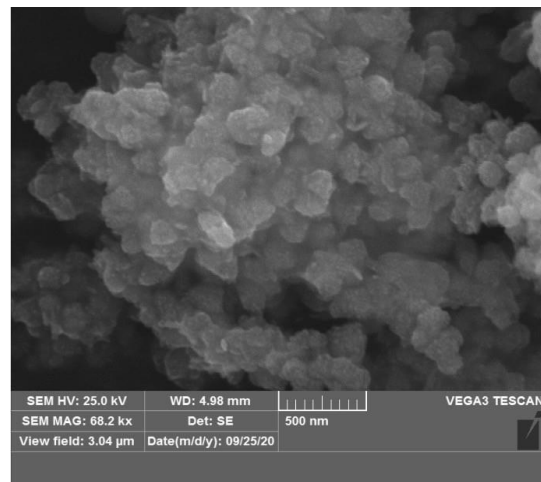
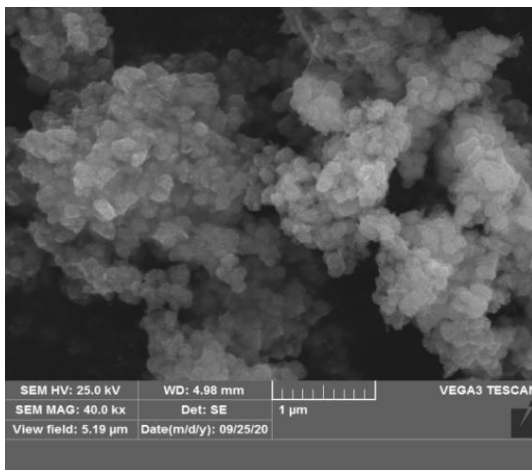
**Product Name:** Iron Oxide Nanoparticles

**Product Series:** Fe<sub>2</sub>O<sub>3</sub>-NANO

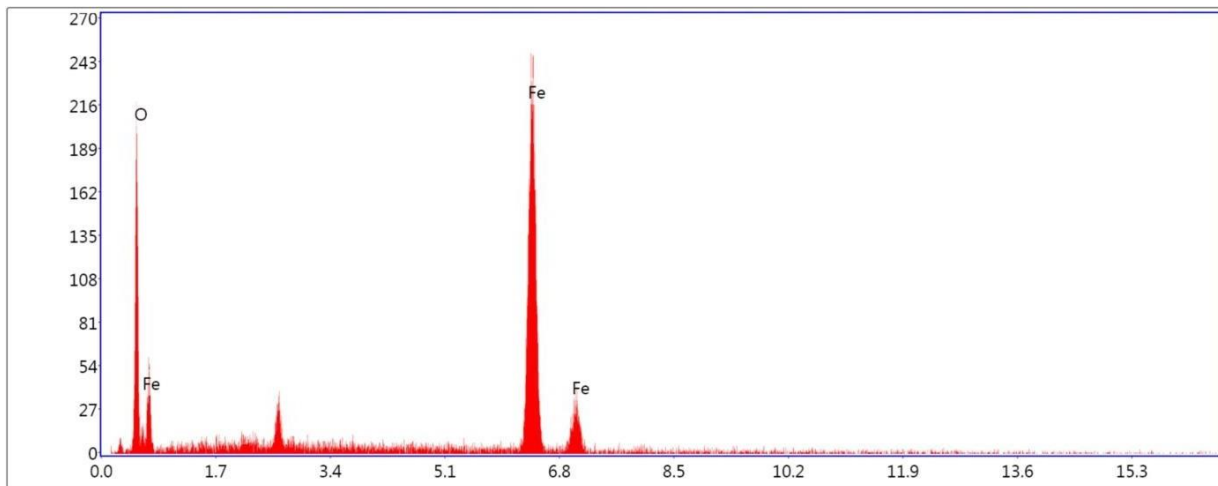
### Properties:

Specifications	Values
Purity	99.9%
Average Particle Size	30 -60 nm
SSA	80-100 m <sup>2</sup> /G
Molecular Weight	159.69 g/mol
Molecular Formula	Fe <sub>2</sub> O <sub>3</sub>
Melting Point	1565 °C
Bulk Density	0.69 g/cm <sup>3</sup>
Cas No.	1309-37-1
Physical Form	Powder
Morphology	Spherical
Color	Red

### SEM IMAGES



**EDX**



Lsec: 30.0    27 Cnts    2.655 keV    Det: Octane Pro Det

**eZAF Smart Quant Results**

Element	Weight %	Atomic %
<b>O K</b>	28.96	58.73
<b>FeK</b>	71.04	41.27

**Size Distribution Report by Intensity**  
v2.2



**Sample Details**

Sample Name: F1  
SOP Name: mansettings.nano  
General Notes:

File Name: Metal.dts	Dispersant Name: Water
Record Number: 91	Dispersant RI: 1.330
Material RI: 2.20	Viscosity (cP): 16.1118
Material Absorbtion: 0.100	Measurement Date and Time: 17 April 2021 15:43:54

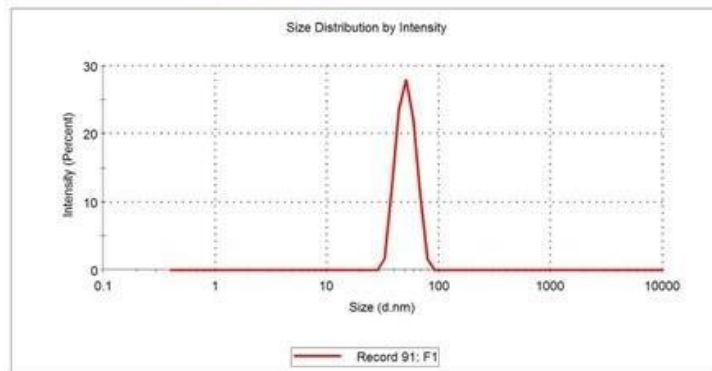
**System**

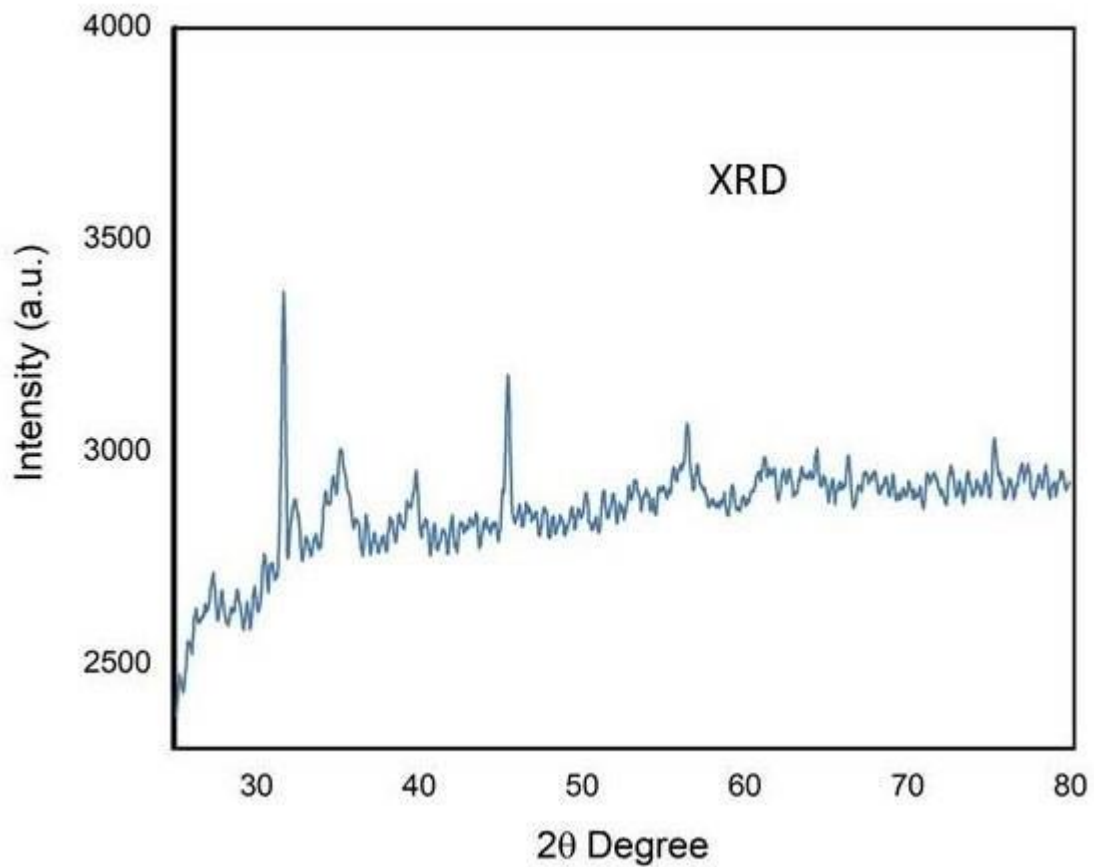
Temperature (°C): 25.0	Duration Used (s): 70
Count Rate (kcps): 182.5	Measurement Position (mm): 4.65
Cell Description: Disposable sizing cuvette	Attenuator: 9

**Results**

	Size (d.n...	% Intensity:	St Dev (d.n...
<b>Z-Average (d.nm):</b> 56.41	<b>Peak 1:</b> 51.37	100.0	9.805
<b>Pdl:</b> 0.068	<b>Peak 2:</b> 0.000	0.0	0.000
<b>Intercept:</b> 0.883	<b>Peak 3:</b> 0.000	0.0	0.000

**Result quality** Refer to quality report





Techinstro assures the above specification and dimensions of the product as per the datasheet. We ensure the quality of the product with moisture-proof packing. This sheet is also available on the website, where a researcher or purchaser can download it merely by clicking on the pdf link. The terms and conditions for the product purchase are mentioned in the quotation. For safe product storage, tips and procedures are provided with the material. For more queries, contact our technical support