Defining Nanomaterial Entity Properties

If you selected one of the Nanomaterial Entity Types listed in the following table, the **Properties** section opens, and you must fill in additional information.

Nanomaterial Entity Type	Properties to Complete
Biopolymer	1. If you are defining a Nanomaterial Entity, enter the **Name** of the biopolymer. 2. Select the **Biopolymer type** of antibody functionalizing entity for this sample. Unknown macro: 'hide' 3. Using the appropriate format, enter the complete **Sequence** of the biopolymer.
Carbon Nanotube	1. Enter the **Average Length** of the nanotube. 2. Enter the **Length Unit** of measurement for the average length measurement of the nanotube. 3. The spatial position or orientation of functional groups located within a molecule. • Enter information about the **Chirality** in the nanotube and its effect on the orientation of functional groups located on the particle. 4. Enter the measurement of the nanotube **Diameter**, as measured from one side of the tube wall through the center of the nanotube to the opposite point on the circumference. 5. Enter the **Diameter Unit** of measurement for the nanotube diameter. 6. Select the appropriate description of the nanotube **Wall Type**. • **DWNT** (Double-Wall Nanotube) Nanotube wall consists of two layers of graphitic carbon. • **MWNT** (Multiple-Wall Nanotube) Nanotube consists of single-walled nanotubes layered inside each other • **SWNT** (Single-wall Nanotube) Wall consists of a single layer of graphitic carbon
Dendrimer	Branches are molecules that branch off of the core (like tree branches). • Enter a description that represents the number of **Branches** in the dendrimer. Generations are shells layered on the core of a dendrimer. Dendrimers consist of layers of chemical shells built on a core module. Each shell consists of two chemicals in the same order (A-B) and each shell is called a generation. The generations are labeled in decimal to illustrate the shell layering/consistency. For example, Generation 2.5 (G2.5) = 1 shell of A-B (1), surrounded by a second shell of A-B (2), topped off with only one chemical A within the shell (.5). As such, the layering structure would be (A-B, A-B, A) = 2.5. • List the **Generations** reflected in this dendrimer.
Emulsion	1. Specify whether the emulsion **Is Polymerized** (required). Polymerization consists of enzymatic reactions that link a series of monomers, forming a polymerized compound (polymer), usually of high molecular weight, by combination of simpler molecules (monomers). 2. Enter the name of the polymer (**Polymer Name**) suspended in the emulsion (required).
Fullerene	1. Enter the **Average Diameter** measurement, as measured from one side of the nanoparticle through its center to the opposite point on the circumference. 2. Enter the **Average Diameter Unit** of measurement for the fullerene diameter. 3. Enter the **Number of Carbon** molecules comprising the fullerene.
Liposome	1. Enter the name of the liposome polymer (**Polymer Name**). 2. Polymerization consists of enzymatic reactions that link a series of monomers, forming a polymerized compound (polymer), usually of high molecular weight, by combination of simpler molecules (monomers). • Specify Yes or No to indicate whether the liposome Is **Polymerized** or not (require).
Polymer	1. In **Initiator**, enter the agent that initiated the polymerization. Examples are free radicals or peroxide. 2. Crosslinking is a covalent bond between two polymers or two different regions of the same polymer. • Specify Yes or No to indicate whether the polymer **Is Crosslinked**. 3. In **Crosslink Degree**, enter the percentage level of covalent linkage in the polymer.