

Selenium Nanoparticles SENP81

Description and applications:

Selenium nanoparticles (SeNP), a nonmetal element with a bright red color, has aroused worldwide attention due to its unique properties and excellent biological activities. Se plays an important role in preventing the formation of free radicals especially reactive oxygen species (ROS). SeNPs in comparison with Se compounds exhibit much lower acute toxicity while increasing the activities of selenoenzymes. Besides, SeNPs are able to inhibit the growth of microorganisms and tumor activities. SeNPs have been used in many disease conditions including cancer, diabetes, inflammatory disorders, liver fibrosis, and drug induced toxicities.

Colloidal selenium nanoparticles are produced with concentrations of 1000, 2000, and 3000 ppm.

Characterization	
CAS	7782-49-2
Stock No.	SENP813
Molecular formula	Se
Molecular weight (g/mol)	78.96
Form	Water base colloid
Color	Orange
Concentration (mg/mL)	3
Functional group	-
Morphology	Spherical
Crystal structure	Trigonal
Size range (nm)	80-100
Total impurity (%)	N/A

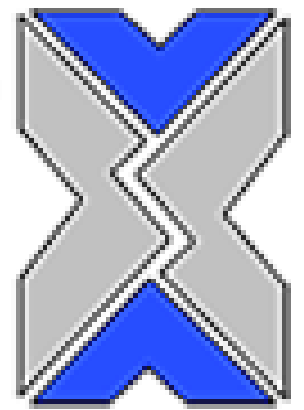


Image of selenium nanocolloid
(SENP81)

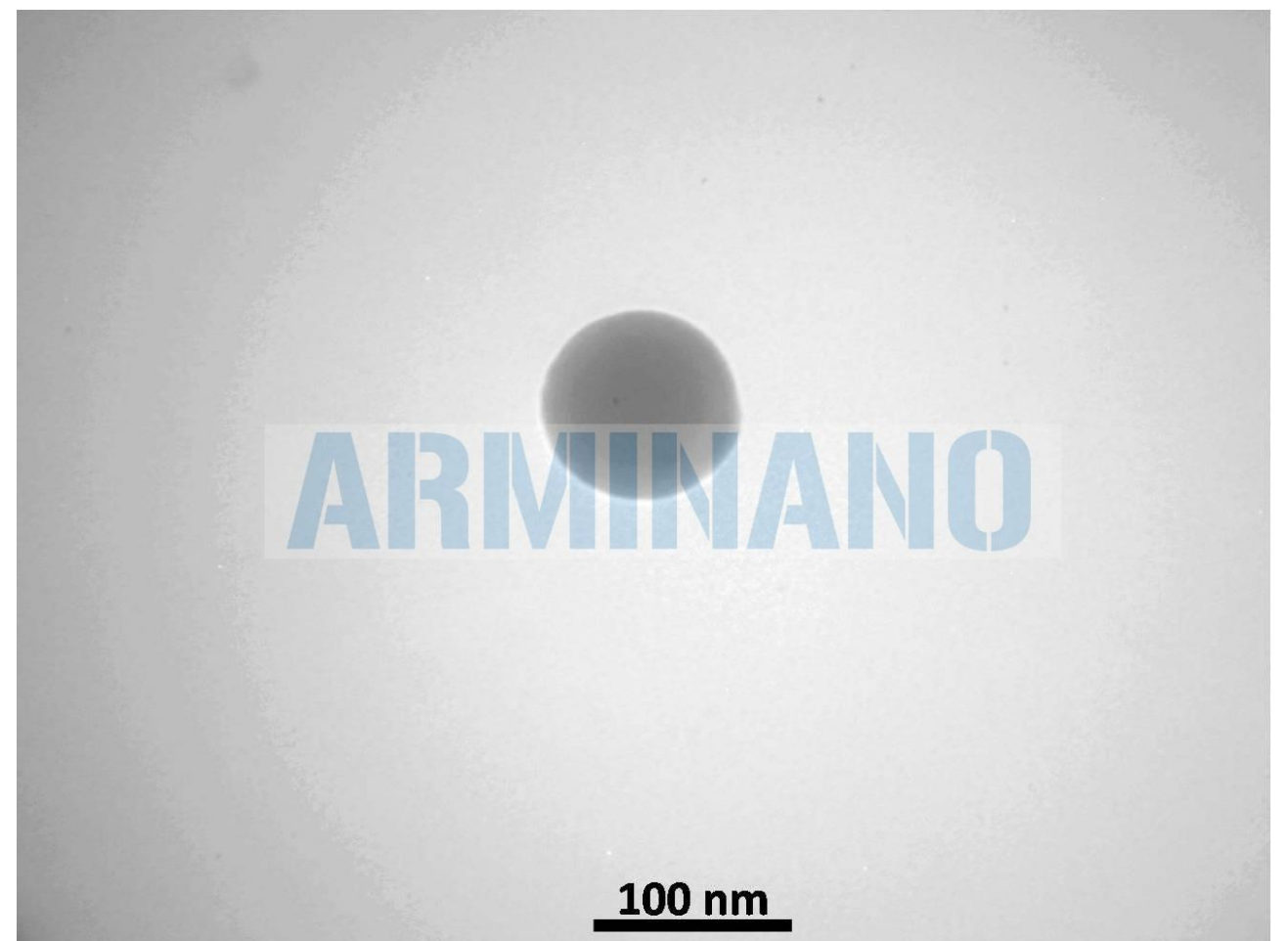
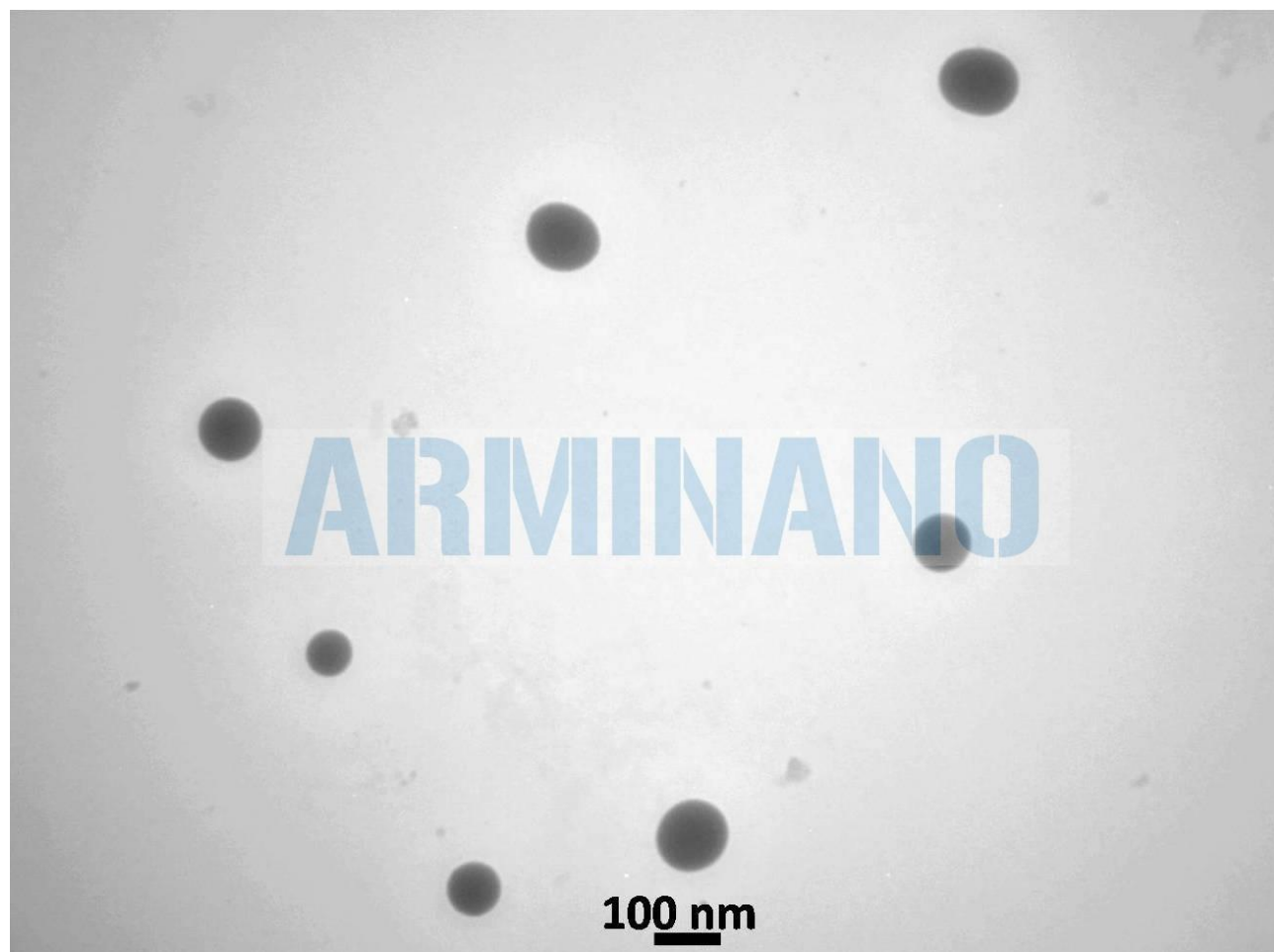
Note: product specifications are subject to amendment and may change over time.

Safety:

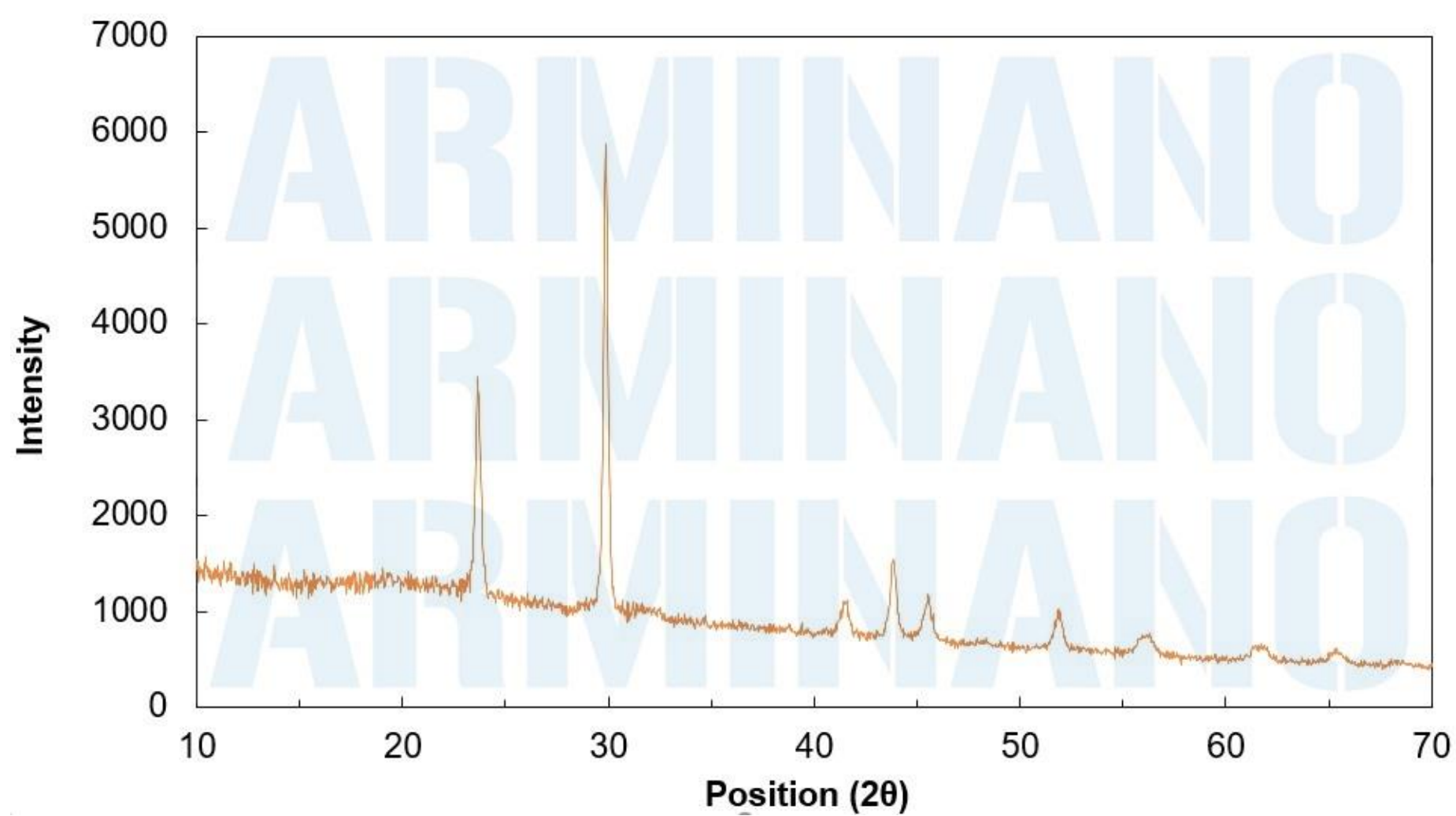
Always use protective gloves and safety glasses.
Wash with soap and water after exposure.
Refer to MSDS prior to handling this material.



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TEM images of SENP81



XRD pattern of SENP81

Storage:

- Keep in in cool and dry place.
- Do not freeze.
- Avoid direct sunlight.
- To disperse sedimented nanoparticles sonication could be used.

Shelf life:

When stored as specified the product is stable for at least 1 month.