

# Introducing ND in Polymers Without Agglomeration

Detonation nanodiamonds don't agglomerate during storage, but will agglomerate if added to ionic liquids and polymers unless their surface is specifically functionalized for stability in the media of interest.

One strategy for introducing NDs into a polymer is through an intermediate solvent, which is evaporated when mixing a polymer with NDs. Please keep in mind what solvents are compatible with your polymer.

Add the DND solution gradually into hot polymer while stirring and evaporating the solvent. This method allows you to introduce DND into the polymer more uniformly with less agglomeration.

It is important to stress the importance of the compatibility of your polymer and solvent. One popular product we have made for introduction into a polymer is 80 nm Hydrophobic DND with Octadecane.

Product Information:

1 g 80-90 nm \$175.00  
ND80nmC18

<https://www.adamasnano.com/nanodiamond-powders/>

It disperses readily in chloroform, which can be easily evaporated at low temperatures in hot mixtures with polymers (introduce to the mixture while stirring). We ship the product as a powder.