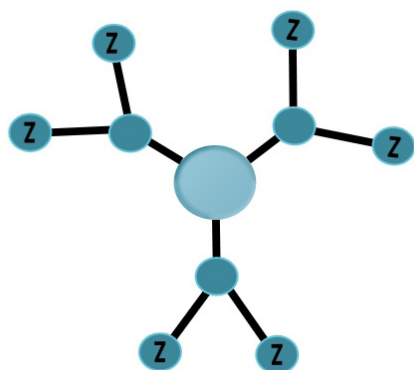


Priostar® Additives

The Next Generation of High Performance, Specialized Additives

Priostar® Additives were specifically designed to improve adhesion, promote cross linking, and enhance dispersion in formulations at low additive levels (0.5 – 2%). Based on DNT's award winning proprietary Priostar® dendrimer chemistry, DNT's Priostar® Additives are the latest innovation in polymeric dendrimer chemistry.

Commercially available additives generally have one to three functional end groups. Priostar® Additives have six functional end groups available with Amine, Hydroxy, or



Carboxylate chemistries. The increased number of functional end groups coupled with the robust dendritic architecture creates many new and unexpected properties for use in formulations.

At DNT, we understand that it is not enough for a company to have great chemistry; the chemistry must offer innovative, affordable commercial solutions to our business partners.

Priostar® Additives

Formulation Solutions for:

Cosmetics
Inks
Coatings
Adhesives

Application Properties:

Solubilizers
Dispersants
Adhesion Promoters
Binders
Cross-linkers
Delivery System

Material Properties:

Robust synthetic polymer structure
UV radiation and shear resistance

dnanotech.com

989.774.6565



Dendritic Nanotechnologies, Inc.®
A Starpharma Holdings Limited Company

2625 Denison Drive
Mount Pleasant, MI 48858

Priostar® Additives Quick Reference and Ordering Guide

Priostar® Additives	DNT-1910 Epoxy	DNT-2300 Amine ¹	DNT-2310 Hydroxy ¹	DNT-2320 Carboxylate ^{1,2}
Product Description	Tetrafunctional aliphatic epoxide <ul style="list-style-type: none"> • 90% purity • 9.98 meq/g • WPE = 102 	Hexafunctional aliphatic primary amine with spherical polyvalent functionality	Hexafunctional aliphatic with spherical polyvalent hydroxyl functionality	Hexafunctional aliphatic with spherical polyvalent carboxylate functionality
Application Areas	Specialty coatings, Adhesives, resin modifier, cross-linker	Inkjet ink, Specialty coatings, Cosmetic additives	Cosmetic additives, Inks, Specialty coatings	Cosmetic additives, Inks, Coatings, Household products, Water treatment
Utilities	Improved cross-linking in coatings, printed circuit boards, and adhesives.	Allows inks to adhere to difficult substrates (polyethylene or other hydrophobic substrate).	Enhance solubility, dispersibility, and delivery of cosmetic actives with poor water solubility.	Similar utility as DNT-2310 but for different class of actives/pigments.
Additives Advantage	Four epoxies per molecule with high purity.	Allows inks to adhere to materials that were unobtainable before with minimal affect on rheology properties.	Non-toxic, non-irritating additive. Solubilizes challenging ingredients that are not compatible with existing surfactants and dispersants. Allows water-based formulation for non-greasy feel.	Similar advantage to DNT-2310 but formulates with a different class of actives.

¹ Available as neat material or 40 w/w% in water. ² Available as acid functionalized. ³ Please inquire about commercial quantity pricing.

Ordering Priostar® Additives

Priostar® Additives are products of Dendritic Nanotechnologies, Inc. (DNT) and are patent protected. A research license is necessary to purchase and use Priostar® Additives for application development.

DNT will grant a royalty free research license to companies for the purpose of investigating Priostar® Additives in applications. A separate written license to permit COMMERCIAL practice under one or more of the DNT patents is required.

To order samples for evaluation, please visit the DNT website dnanotech.com or call 989.774.6565.

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