

DARVAN®

Dispersing Agent

DARVAN products are highly effective dispersing agents used to lower the viscosity of particulate slurries and to inhibit the settling of particulate solids. When finely divided solids are dispersed in water, there is a tendency for particles to form agglomerates or flocs. The addition of a **DARVAN** dispersant increases the strength of the anionic charge on the particles, causing them to repel one another and remain dispersed. The resulting dispersion has more fluidity, stability and smoothness. For example, pigment suspensions develop greater color strength, additive concentrates remain stable and fluid, pesticide sprays maintain maximum activity, impact grinding achieves maximum efficiency, and ceramic bodies attain optimal rheology.

TYPICAL PROPERTIES

Typical properties are not specifications. Please request copies of our **DARVAN** specifications.

	Form	Solids	MW	pH	Moisture	Foaming	Ash	Sodium
<i>Sodium Polynaphthalene Sulfonate</i>								
DARVAN 1 Spray Dried	granules	---	3000	8.0-10.5 ¹	5% max	none	---	---
DARVAN 670	powder	---	3000	8.0-10.5 ¹	8% max	none	---	---
DARVAN 670L	liquid	40%	---	9.0-10.5 ¹	---	none	---	---
<i>Sodium Polymethacrylate</i>								
DARVAN 7-NS	powder	---	13,000	8.5-11.5 ¹	5% max	none	---	---
DARVAN 7-N	liquid	25%	13,000	9.5-11.5 ²	---	none	---	---
<i>Ammonium Polymethacrylate</i>								
DARVAN C-N	liquid	25%	15,000	7.5-9.0 ²	---	none	<0.04%	<70 ppm
<i>Sodium Polymethacrylate and Sodium Polyacrylate</i>								
DARVAN 811D	powder	---	3,500	6.0-9.0 ²	8% max	none	---	---
<i>Sodium Polyacrylate</i>								
DARVAN 811	liquid	43%	3,500	7.0-8.0 ¹	---	none	---	---
<i>Ammonium Polyacrylate</i>								
DARVAN 821A	liquid	40%	3,500	7.0-8.0 ¹	---	none	<0.01%	<50 ppm
<i>Sodium Lignosulfonate</i>								
DARVAN 2	powder	---	---	7.0-9.0 ³		slight	---	---

¹1% solution ²5% solution ³10% solution ⁴neat

The amount of **DARVAN**® Dispersing Agent required for dispersant and stabilization applications will vary with the composition of the product. Simple experimentation will determine the proper amount for each specific use. Usually, the concentration required is between 0.25% and 5.0%, based on the weight of the ingredient being dispersed. The optimal amount of dispersant can be determined by a dispersant demand curve method.

TYPICAL USES

See individual department data sheets for detailed use recommendations.

	DARVAN						
	1 Spray Dried	670	2	7-N, 7-NS	811, 811D	821A	C-N
Color pigment dispersions	X	X	X	X	X		
Mineral dispersions	X	X	X	X	X		
Particulate chemical dispersions	X	X	X	X	X		
Agricultural pesticide concentrates			X	X	X	X	X
Agricultural sprays			X	X	X	X	X
Pitch Control (pulp & paper)	X	X					
Whiteware bodies, glazes, refractories				X	X		
Specialty ceramics requiring low Na						X	X
Spray dried slurries				X	X	X	X

FDA STATUS

DARVAN	FDA 21CFR	SUBJECT HEADING	LIMITATION
2, 7-N, 7-NS	173.310	Boiler water additives	None
1 Spray Dried, 670, 2, 7-N, 7-NS, 811, 811D, 821A	175.105	Adhesives	None
1 Spray Dried 670	175.300	Resinous and polymeric coatings	≤0.6% by weight of cement solids in can end cements for containers having a capacity of not less than 5 gallons
1 Spray Dried, 670	176.170	Components of paper and paperboard in contact with aqueous and fatty foods	For use as an adjuvant to control pulp absorbency and pitch content prior to sheet-forming operations in paper manufacturing
2, 811, 811D	176.170	"	None
7-N, 7-NS	176.170	"	≤0.3% by weight of the coating for viscosity control
1 Spray Dried, 670, 2, 811, 811D	176.180	Components of paper and paperboard in contact with dry food	None
1 Spray Dried, 670, 2	176.210	Defoaming agents used in the manufacture of paper and paperboard	None
1 Spray Dried, 670	177.1200	Cellophane	0.1% for use as an emulsifier
1 Spray Dried, 670, 2	177.1210	Closures with sealing gaskets for food containers	≤0.2% by weight of closure sealing gasket compositions
1 Spray Dried 670	177.1650	Polysulfide polymer-polyepoxy resins	None
2	182.99	Adjuvants for pesticides chemicals	Surfactant
7-N, 7-NS	182.99	"	pH control.
2	573.600	Lignin sulfonates (for animal feed)	≤4% of animal feed
EPA 40CFR			
2	180.910	Inert ingredients used pre- and post-harvest; exemptions from the requirement of a tolerance.	Surfactant, related adjuvants of surfactants
2	180.930	Inert ingredients applied to animals; exemptions from the requirement of a tolerance.	Surfactant, related adjuvants of surfactants
7, 811, 811D, C-N, 821A	180.960	Polymers; exemptions from the requirement of a tolerance	None

DARVAN is a registered trademark of Vanderbilt Minerals, LLC.

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