



Distributed in the Interest
of Product Development

VANDERBILT

Technical Data

VAN GEL[®] SX

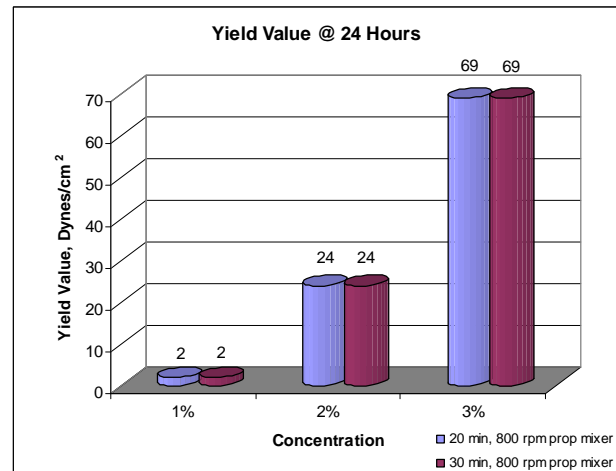
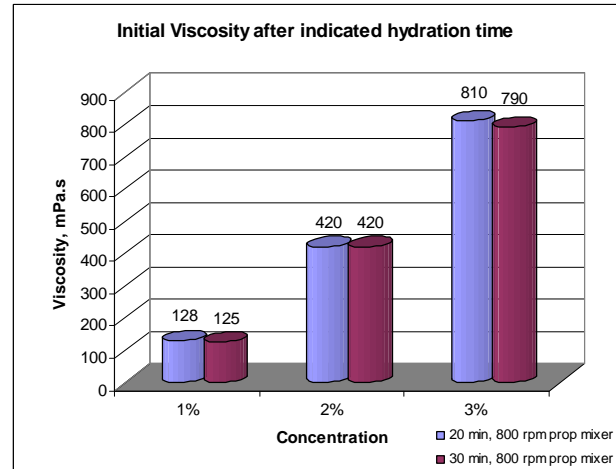
Magnesium Aluminum Silicate

Bentonite and Xanthan Gum Blend

VAN GEL[®] SX is a tailored blend of natural bentonite clay and xanthan gum that is an efficient thickener, suspending agent and emulsion stabilizer for HI&I and agricultural formulations.

VAN GEL SX features:

- **Rapid hydration** – Mix until smooth. Hydrates quickly with low shear mixing in unheated water.
- **High yield value** – The synergistic combination of bentonite and xanthan gum effectively and reliably stabilizes water-based suspensions and emulsions.
- **Fine rheology control** – Because the clay-gum synergism provides efficient thickening as well as high yield value, stabilization is possible over a wide range of product viscosity.
- **Wide pH compatibility** – Suitable for use in most cleaners, polishes, agricultural concentrates and industrial suspension and emulsion products. Not recommended for compositions containing oxidizers or more than pH-adjusting levels of alkaline caustics.
- **Broad temperature stability** – Stabilizes suspensions and emulsions in the temperature range typical of storage and transportation.



Typical Properties:

Viscosity, 2%	300-500 cps
pH, 2%	7.5 – 9.5
Moisture	8% maximum

R.T. Vanderbilt Company, Inc., 30 Winfield Street, P.O. Box 5150, Norwalk, CT 06856-5150
Telephone: (203) 853-1400 - Fax: (203) 853-1452 - Web Site: www.rtvanderbilt.com

Before using, read, understand and comply with the information and precautions in the Material Safety Data Sheets, label and other product literature. The information presented herein, while not guaranteed, was prepared by technical personnel and, to the best of our knowledge and belief, is true and accurate as of the date hereof. No warranty, representation or guarantee, express or implied, is made regarding accuracy, performance, stability, reliability or use. This information is not intended to be all-inclusive, because the manner and conditions of use, handling, storage and other factors may involve other or additional safety or performance considerations. The user is responsible for determining the suitability of any material for a specific purpose and for adopting such safety precautions as may be required. R.T. Vanderbilt Company, Inc. does not warrant the results to be obtained in using any material, and disclaims all liability with respect to the use, handling or further processing of any such material. No suggestion for use is intended as, and nothing herein shall be construed as, a recommendation to infringe any existing patent, trademark or copyright or to violate any federal, state or local law or regulation.

Prototype formulations:

Toilet Bowl Cleaner with "Green" Actives No. 605

		Wt. %
A	VAN GEL[®] SX Bentonite and Xanthan Gum	2.0
	Water	84.5
B	L(+)-lactic acid, 80% (PURAC [®] Sanilac ¹)	10.0
	Sodium methyl 2-sulfolaurate & Disodium 2-sulfolaurate (ALPHA-STEP [®] MC-48 ²)	3.5

¹PURAC America, Lincolnshire, IL

²Stepan Company, Northfield, IL

Procedure: Add the **VAN GEL SX** slowly to the water agitated at high speed. Mix until fully hydrated.. Slowly add the Part B ingredients in order, mixing well after each until uniform. Avoid air entrapment.

Potassium Carbonate Oven Cleaner No. 606

		Wt.%
A	VAN GEL[®] SX Bentonite and Xanthan Gum	2.0
	Water	54.0
B	Triethanolamine	10.0
	Tripropyleneglycol Methyl Ether Solvent (DOWANOL [®] TPM ¹)	5.0
	Potassium Carbonate, 25% Solution	28.0
	Sodium Cocoyl Sarcosinate, 30% Solution (PERLASTAN [®] C-30 ²)	1.0

¹Dow Chemical Company, Midland, MI

²Struktol Company of America, Stow, OH

Procedure: Add the **VAN GEL SX** slowly to the water agitated at high speed. Mix until fully hydrated. Reduce the mixing speed and add the Part B ingredients in order, mixing well after each addition until uniform. Avoid air entrapment.

Concentrated Phosphoric Acid Gel No. 607

		Wt.%
A	VAN GEL[®] SX Bentonite and Xanthan Gum	2.5
	Water	62.5
B	Phosphoric Acid, 85%	30.0
	Octoxynol-9 (TRITON [™] X-100 ¹)	5.0

¹Union Carbide Chemicals & Plastics Technology Corporation, Midland, MI

Procedure: Add the **VAN GEL SX** slowly to the water agitated at high speed. Mix until fully hydrated. Reduce the mixing speed and add the Part B ingredients in order, mixing after each addition until uniform. Avoid air entrapment.

Natural Citrus Furniture Polish No. 608

		Wt.%
A	VAN GEL[®] SX Bentonite and Xanthan Gum	2.0
	Water	72.65
B	Beeswax Emulsion (BE 720 ¹)	10.00
	Carnauba Emulsion (Kahl CE-404A ¹)	10.00
C	Emulsifying Agent (PLURONIC [®] L44 ²)	0.35
	Orange Oil (Tech Grade d-limonene ³)	5.00
D	Preservative	qs

¹Lambent Technologies Corp., Gurnee, IL

²BASF Performance Chemicals, Mount Olive, NJ

³Florida Chemical, Winter Haven, FL

Procedure: Add the **VAN GEL SX** slowly to the water agitated at high speed. Mix until fully hydrated. Slowly add the Part B and Part C ingredients in order, mixing well after each until uniform. Avoid air entrapment.

Trademark Information:

VAN GEL is a registered trademark of R.T. Vanderbilt Company, Inc.

ALPHA-STEP is a registered trademark of Stepan Company.

DOWANOL is a registered trademark of Dow Chemical Company.

PERLASTAN is a registered trademark of Schill & Seilacher GmbH.

PLURONIC is a registered trademark of BASF Corporation.

PURAC is a trademark of Purac AB.

TRITON is a registered trademark of Union Carbide Chemicals and Plastics Technology Corporation.

01/10/12