Distributed in the Interest
of Product Development

VANDERBILT Technical Data

SETSIT® 104EZ Liquid Accelerator
No. 1237

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

TECHNICAL
DATA

No. 1237
Rubber Department

SETSIT® 104EZ Liquid Accelerator

The **SETSIT** product line of ultra accelerators consists of proprietary water-soluble/water-miscible activated dithiocarbamates. They are easy to use and are freeze/thaw stable. However, due to their chemical nature, these products tend to crystallize over time and normally require straining prior to use.

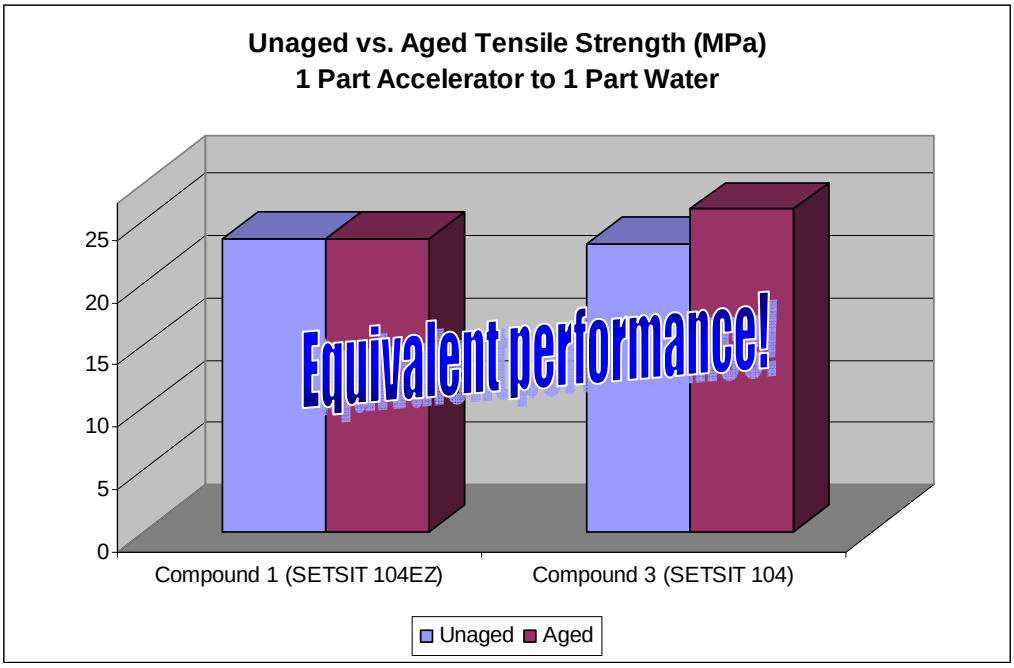
An improved version of **SETSIT 104** which no longer requires this additional step has been developed by chemists at Vanderbilt. This new product, **SETSIT 104EZ**, does not crystallize as do other sodium dithiocarbamates, eliminating the need to strain or process the product before use. **SETSIT 104EZ** performs equivalently to **SETSIT 104**, providing all the benefits of the **SETSIT** product line. Additionally, **SETSIT 104EZ** incorporates easily into the latex, both when diluted and at full concentration.

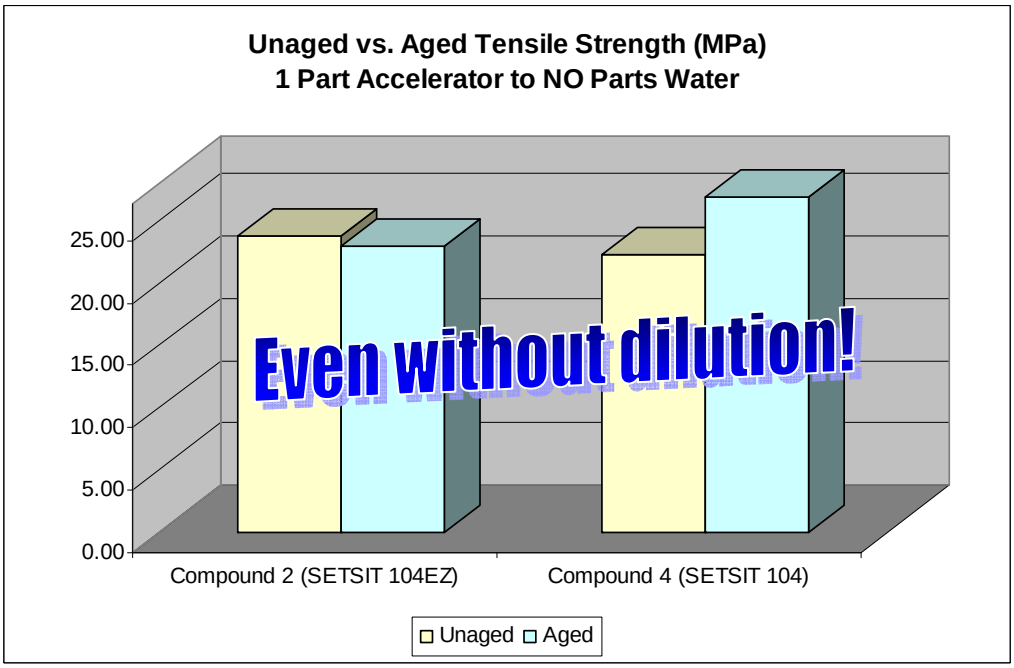
- No preparation or pre-processing is required.
- Accurate volumetric measurements are fast and easy.
- Housekeeping and storage are neat and clean.
- Liquid accelerators are freeze/thaw stable.

INGREDIENTS	**COMPOUNDS**			
	1	2	3	4
Natural Rubber Latex	100.0	100.0	100.0	100.0
Potassium Hydroxide (10%)	0.5	0.5	0.5	0.5
DARVAN® SMO surfactant	0.3	0.3	0.3	0.3
DARVAN WAQ surfactant	0.3	0.3	0.3	0.3
Sulfur Dispersion (50%)	1.0	1.0	1.0	1.0
VANOX® SPL Antioxidant Slurry	2.0	2.0	2.0	2.0
SETSIT® 104 Liquid Accelerator	---	---	1.0	1.0
SETSIT 104EZ Liquid Accelerator	1.0	1.0	---	---
Water	1.0	---	1.0	---

Films were cured at 100°C for 30 minutes. Films were then aged for 7 days at 70°C.

Compounds 1 and 3 were made as normally recommended: the accelerator was diluted with equal parts of water prior to its addition to the latex. In Compounds 2 and 4 the accelerator was added to the latex WITHOUT prior dilution.





RESULTS	COMPOUNDS			
	1	2	3	4
Before Aging				
Modulus @ 300% (MPa)	1.6	1.5	1.4	1.5
Tensile at Max. Load (MPa)	23.5	23.8	23.1	22.3
Elongation at Max. Load (%)	715.6	737.2	718.9	678.7
After Aging				
Modulus @ 300% (MPa)	1.2	1.3	1.3	1.2
Tensile at Max. Load (MPa)	23.5	23.0	25.9	26.9
Elongation at Max. Load (%)	711.5	682.9	687.6	707.2

 08/08

For additional information regarding our high quality minerals and chemicals, please visit our website:

www.rtvanderbilt.com

- Technical data sheets
- MSDS information
- Sample requests
- Specifications
- Product brochures
- Articles
- Presentations
- Reports