

LABORATORY TEST REPORT

COMPOUND: VNC90-30I
COLOR: N/A
SPECIFICATION: GENERAL

ANNUAL REPORT DATE: 4/17/13
ORIGINAL LABORATORY REPORT DATE: 8/9/12; ID#199
Page 1 of 2

DATA REPRESENTS ACTUAL LABORATORY TESTS

Test Freq.	Test Method	Spec. Range	Results
	Density g/cm ³ , (ISO 1183, Method A ASTM D792 Method A)	1.45 max.	1.41
	Hardness, Shore A, 15 sec delay (ASTM D2240)	90 ± 5	89
	Tensile Strength, MPa, min. (ASTM D638)	10 MPa	12.4 MPa
	Elongation % (ASTM D638), min.	100%	145%
	Tear Strength, kN/m (ISO34-1B), min.	35 kN/m	60.5 kN/m
	Cold Flexibility, @ -30°C (FLTM BN 102-01, 19mm mandrel)	No Cracks	No Cracks
	Color Stability, Rating (ISO 188/ASTM D573)	4AATCC	4 AATCC
	Heat Aging Performance 1000 hrs at 80 ± 2°C (ASTM D573)		
	Tensile Strength change, % of original value	20% max.	+2.2%
	Elongation change, % of original value	20% max.	14.1%
	Weight change, % of original value	5% max.	-1.13%
	Paint Staining (FLTM BP 153-01)*, **	No Stain	No Stain
	Interior Applications		
	Flammability, FMVSS302, burn rate, mm/min.	100mm/min. max.	SE (self-extinguishing)
	Exterior Applications		
	Xenon Arc Weatherometer SAE J1960, 2500 kJ/m ²	ΔE = 3.0 max.	ΔE = 0.25 (black)

* Test is outside our scope of accreditation.

** This test was performed by a subcontracted accredited testing laboratory.

*** This test was performed at supplier's biological laboratory.

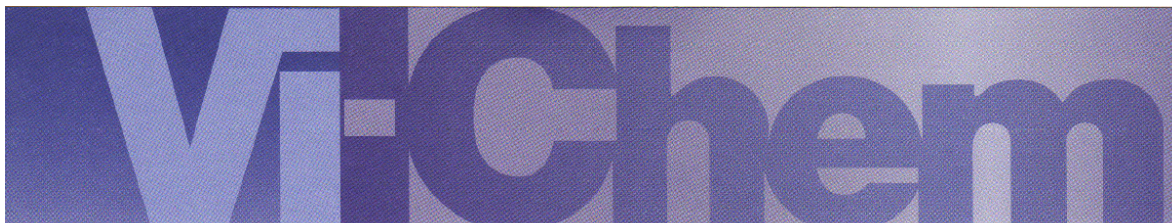
O:\2013\546_VNC90-30I-General.doc

All tests are performed once.

This report is not to be reproduced except in full.

Additional information about testing may be found in the accreditation section on our website at www.vichem.com

VI-Chem Corporation, 55 Cottage Grove, SW, Grand Rapids, MI 49507 Office (616) 247-8501 or (800) 477-8501, Fax (616) 247-8703



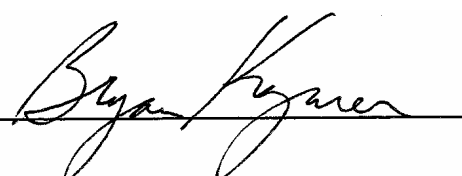
LABORATORY TEST REPORT

COMPOUND: VNC90-30I
COLOR: N/A
SPECIFICATION: GENERAL

ANNUAL REPORT DATE: 4/17/13
ORIGINAL LABORATORY REPORT DATE: 8/9/12; ID#199
Page 2 of 2

DATA REPRESENTS ACTUAL LABORATORY TESTS

Test Freq.	Test Method	Spec. Range	Results
	Resistance to Sulfide Staining, ASTM D1712*,**	No Staining	No Staining
	Mildew Resistance, ASTM G21*,***	No apparent fungus attack	No apparent fungus attack
	Florida, 2 years, SAE G7*, **	$\Delta E = 3.0$ max.	$\Delta E = 0.40$ (black) No objectionable stain
	Asphalt Stain Resistance, GM9689P	$\Delta E = 3.0$ max.	$\Delta E = 1.36$ (black)

Approved by: 

* Test is outside our scope of accreditation.

** This test was performed by a subcontracted accredited testing laboratory.

*** This test was performed at supplier's biological laboratory.

O:\2013\546_VNC90-30I-General.doc

All tests are performed once.

This report is not to be reproduced except in full.