

VOC Content Test Certificate Report Validation

INTERTAC

Green Star NZ - V3 Materials Framework

The Green Star NZ V3 Technical manual states that VOC emissions can be demonstrated through the provision of test results showing compliance to a recognised Ecolabel or a recognised Indoor Air Quality Scheme.

Green Tag is noted as an approved ecolabel for Sealants and Adhesives (Refer to NZGBC approved ecolabel and IAQ schemes diagram, available to download from the NZGBC website)

The GreenTag Technical Manual includes a VOC emission criteria section for Sealants and Adhesives, and states:

“VOCs are to be in conformance with the grams per litre (g/L) content limits which have been adopted from South Coast Air Quality Management District (California, US) – Rule 1168.”

The VOC test report for Intertac (below) shows the product complies with District Rule 1168. “Test method: SCAQMD Method 304-91 Determination of Volatile Organic Compounds (VOC) in Various Materials as referenced by South Coast Air Quality Management Division (SCAQMD) Rule 1168.”

EnviroSpec therefore recognises the product complies with the VOC test method requirements in GreenTag for Sealants and Adhesives. Therefore the current Intertac certificate demonstrates compliance with current NZGBC V3 Materials requirements for Low VOC emissions in this product category.

Green Star Technical Manual -

Option 4	Eco-label OR	applied to the stone or ceramic will need to comply with the VOC requirements set out in the Credit. Where a product holds a third-party verified eco-label, this product may be deemed to comply with VOC requirements. Eco-labels generally specify maximum permissible VOC content within a particular product type. Eco-labels deemed compliant for this credit can be found on the NZGBC website (www.nzgbc.org.nz)
	IAQ Scheme OR	Indoor Air Quality Schemes test the <i>emission</i> rates of VOCs. Products certified with a recognised IAQ Scheme are deemed to comply with the criteria. For a list of recognised IAQ schemes, refer to the NZGBC website (www.nzgbc.org.nz)
	Data Sheets /Test Results	Project teams may demonstrate through the provision of product data sheets or test results that a particular product meets the <i>VOC content or emission</i> requirements of a recognised Eco-label or the <i>emission</i> requirements of a recognised IAQ scheme. Where test results are provided, a test report from a competent laboratory comparing the VOC limits of the product as measured against the limits set by the recognised label/ scheme(s) is acceptable to show compliance as long as the units of measure are the same. If VOC levels are determined by laboratory testing, the supporting information must include the test report from a laboratory competent to complete the relevant test method. Laboratories may demonstrate their competency by being accredited or registered to ISO/IEC 17025 from International Accreditation New Zealand (IANZ) or other recognised accreditation agency (e.g. NATA in Australia).

Extract from NZGBC Recognised ecolabels and IAQ schemes compliance table

Recognised Eco-labels and Indoor Air Quality Schemes				
Issued	Changes			
8-Sep-15	First Release			
29-Sep-15	updated to include homestar, responsible sourcing, SMART, and further IAQ schemes recognised for EWP			
<p>The following table lists recognised ecolabels for the Materials Credits in Green Star 2009 and Green Star v3. This list will be updated to add programs as they become Products and Materials for which Eco-labels are an accepted method of compliance are listed across the top row (shaded grey). Eco-labels and their level of recognition (A, B or C) are listed down the first column (shaded green). If the eco-label automatically fulfils the VOC compliance requirement Recognised Indoor Air Quality Schemes are listed in the first column below eco-labels (shaded yellow). These can be used to demonstrate compliance with VOC or Fo</p>				
	Adhesives & Sealants	Applied Coatings	VOC compliance	Ceilings
Green Star 2009 Credit	IEQ-3 / MAT-J	IEQ 3 & MAT-3		IEQ-3 / MAT-B / MAT-K
Green Star v3 Credit	MAT-4	MAT- 3 & MAT-4		MAT-4
Homestar Credit	MAT-2	MAT-1 & MAT-2		MAT-1
ECO-LABELS				
Environmental Choice New Zealand ECNZ				
Level A Recognition		EC-07-15 - Paints	Y	EC-46-15 - Interior Lining Products
GreenTag GreenRate				
Level A Recognition	GreenRate v3.2 Level A	GreenRate v3.2 Level A	Y	GreenRate v3.2 Level A
Level B Recognition	GreenRate v3.2 Level B	GreenRate v3.2 Level B	Y	GreenRate v3.2 Level B
Level C Recognition	GreenRate v3.2 Level C	GreenRate v3.2 Level C	Y	GreenRate v3.2 Level C
Good Environmental Choice Australia				

Extract from GreenTag Technical Manual

7.8.2 Life Cycle Issues:

i) Emissions to Air: Indoor

VOCs:

The minimum standard for any Certified product detailed below:

VOCs are to be in conformance with the grams per litre (g/L) content limits set out in the table below which have been adopted from South Coast Air Quality Management District (California, US) – Rule 1168.

Table 7.8.1 Maximum TVOC limits for Adhesives and Sealants

Maximum TVOC content*	Product Type (g/L of product)
Indoor carpet adhesive	50
Carpet pad adhesive	50
Wood flooring and laminate adhesive	100
Rubber flooring adhesive	60
Sub-floor adhesive	50
Ceramic tile adhesive	65
Cove base adhesive	50
Dry wall and panel adhesive	50
Multipurpose construction adhesive*	70
Structural glazing adhesive	100
Architectural sealants*	250

* Sealants used to enhance the fire- and water-proofing properties are included

Emissions to Water

Compliance Testing: Refer to South Coast Air Quality Management District Rule 1168 for testing methods.

Exempt compounds must not be subtracted in the calculation of VOC content.

Values should reflect the final product as mixed.

The TVOC content of the ready-to-use product may also be calculated theoretically as the sum total of the VOCs of each of the raw material components comprising the product

Where the TVOC content of individual components is not known, it must be determined experimentally by ASTM D3960, which is comprised of four individual testing procedures that measures TVOC (D2369) as well as density (D1475), water content (D4017) but not excluding exempt compounds (D4457).



VOC Content Test Certificate

Wednesday August 18th, 2010

Manufacturer: RLA Polymers Pty Ltd (215 Colchester Road, Kilsyth, VIC, 3137)

Sample Description: Intertac Modified Adhesive

Date Tested: August 2010 (Tested by FORAY Laboratories – NATA Accreditation 1231)

Test Method: SCAQMD Method 304-91 Determination of Volatile Organic Compounds (VOC) in Various Materials as referenced by South Coast Air Quality Management Division (SCAQMD) Rule 1168

Test Data:

Specification Green Building Council of Australia Green Star Office Design V2 IEQ-13 Green Star Office Interiors V1.1 IEQ-11	Intertac Modified Adhesive
Indoor Carpet Adhesive 50 grams per Litre as VOC content material	11 grams per Litre as VOC content per material
Specification Green Building Council of Australia Green Star Office Design V3 IEQ-13	Intertac Modified Adhesive
Indoor Carpet Adhesive 50 grams per Litre as VOC content material	11 grams per Litre as VOC content per material

Dr. Vyt Garnys
PhD, BSc(Hons) AIMM, ARACI, ISIAQ
ACA, AIRAH, FMA
Managing Director and Principal Consultant

F1008-05