



DUCTWARE PRODUCT REVIEW - FOR GREEN STAR

PRODUCT: PROseal

This product review is current at the time of issue. As Green Star is a constantly evolving and developing rating tool it will remain Ductware's responsibility to ensure that product information relating to Green Star is kept up to date. From time to time the Green Building Council of Australia issue an updated 'Technical Clarifications and CIR Rulings' document that provides clarifications, updates and modifications to the suite of Green Star rating tools. This update by the GBCA takes precedence over all existing printed Green Star rating tools – hence the 'rating tool system' comprises of the relevant Green Star Technical Manual AND the Technical Clarifications and CIR Rulings' document. This document can be found at <http://www.gbca.org.au/green-star/technical-clarifications-cir-rulings/>

GREEN STAR INFORMATION:

APPLICABLE CREDITS	REQUIREMENTS	PRODUCT REVIEW
<p>Contributes to: IEQ-8 Volatile Organic Compounds Applies to all Green Star rating tools.</p>	<p>Adhesives & Sealants; 95% of all adhesives & sealants must meet the TVOC Content Limits outlined in Table IEQ-13.2. (refer attached)</p>	<p>Cetec certificate dated 10/7/09 indicates that product complies with current emissions criteria.</p> <p>In accordance with IEQ-8 TC No.28 (refer below), TVOC calculations must not exclude 'exempt compounds'. The Cetec certificate indicates that the final product was tested for VOC emissions and hence appears to comply with this clarification.</p> <p>Cetec certificate attached references some GS tools. The evidence of <1g/L VOC is the vital information on certificate.</p> <p>VOC emissions table may be updated from time to time by GBCA. Refer GBCA web site for updates.</p> <p>Refer IEQ-10 Mould Prevention for 'contributory / stretch'. Product is mildew resistant.</p>

GREEN STAR INFORMATION:

APPLICABLE CREDITS	REQUIREMENTS	PRODUCT REVIEW
Contributes to: Mat-7 Waste Management Applies to all Green Star rating tools.	At least 60% or 80% of all demolition and construction waste to be reused or recycled.	Contributory; packaging / containers will contribute to on-site waste stream.

TABLE

Maximum TVOC Content Limits for Paints, Varnishes and Protective Coatings

The tables in the Paints and Adhesives tab of this spreadsheet supersede the Paint and Adhesive & Sealant VOC Levels stipulated in the following Green Star rating tools.

- Green Star - Office Design v2
- Green Star - Office As Built v2
- Green Star - Office Interiors v1.1

All Office v2 projects registered after 20/11/2008 must comply with this correction.

All projects registered before this date have the following options:

- 1) Use the tables below as per this technical clarification; or
- 2) Use the tables in the current Technical Manual.

Project teams cannot combine elements from both options to support their submission.

For the tools listed below the only change is the addition of "Walls and Ceilings - interior gloss" to the Paints Table. All other values are identical:

- Green Star - Office v3,
- Green Star - Retail Centre v1
- Green Star - Education v1



Prepared by: Synergy Green Pty Ltd

Date: October 2009



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ADHESIVES

Product Type/Sub Category	Max TVOC content (g/l of ready-to use 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 & Panel adhesive	50
Multipurpose construction adhesive*	70
Structural glazing adhesive	100
Architectural sealants*	250
Any solvent-based coatings whose purpose is not covered in table	200
Maximum TVOC limits for Adhesives & Sealants	
*Sealants used to enhance the fire- and water-proofing properties are included.	

IEQ-8 TC No.28 (Sept'08)

All registered projects must include the exempt compounds (based on ASTM D3960 as well as SCAQMD Rule 1168), in the TVOC calculations.

The exemption for those compounds in the Standards is based on the impact that they have on air pollution, not indoor environment quality (i.e. if the VOC compound did not participate in air pollution reactions, it was exempted from the VOC content). A practice in the industry exists to replace non-exempt compounds (e.g. methyl ethyl ketone) with "exempt compounds" (e.g. acetone) in formulations of paints, coatings and adhesives. While this lowers the TVOC content of the product, it will still have an indoor environment impact. For this reason exempt compounds must be included in TVOC calculations submitted.



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