



**ALSEAL MARKETING SDN. BHD.** (625140-D)

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47000 SUNGAI BULOH, SELANGOR.

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FAX: 603-6157 8002

EMAIL: Info@alsealmarketing.com

WEBSITE: <http://www.alsealmarketing.com>

GST No.: 001625505792

Our reference: 10/G18/LTR/Y265

10<sup>th</sup> July 2018

Dear Valued Customer / Business Partners,

**RE: “ALSEAL” AS-202 Fire Retardant Silicone Sealant - Low-VOC Compliant**

This is to confirm that the volatile organic compound (VOC) content for **“ALSEAL” AS-202 Fire Retardant Silicone Sealant** has been tested by an independent third-party testing lab. The VOC content determination was conducted as per the requirement of South Coast Air Quality Management District (SCAQMD) rule 1168.

SCAQMD rule 1168 states that USEPA Method 24 (Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating) shall be used to determine the VOC content of adhesives and sealants. This reference method is **widely accepted worldwide** for the VOC content determination.

VOC Determination Method	Maximum limit	Results	Report no.
USEPA Method 24	250 g/L (architectural sealants)	43.83 g/L	CCN18060187H03-0
USEPA Method 310	4% (portable sealants and caulking compounds)	3.46%	CCN18060188H03-0

(For Hong Kong, AS-202 is classified as portable sealants and caulking compounds. Therefore USEPA Method 310 is used to determine the VOC content of the product.)

**Conclusion**

Based on the results shown above, AS-202 is able to meet the **low-VOC architectural sealant** requirement.

With the low VOC feature, the use of AS-202 could contribute to **Leadership in Energy and Environmental Design (LEED)** credits under the **IEQc4.1: Low-Emitting Materials - Adhesives and Sealants** credit category. For Malaysian market, AS-202 could contribute to the **Green Building Index (GBI)** credits.



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Should you require further information concerning the above product, please do not hesitate to contact us.

Thank you.

Yours sincerely,

For Alseal Marketing Sdn. Bhd.

A handwritten signature in black ink, appearing to be 'Yap Wai Hoong', written over a horizontal line.

Prepared by: Yap Wai Hoong  
(R&D Chemist)

A handwritten signature in black ink, appearing to be 'Alex Ng', written over a horizontal line.

Verified by: Alex Ng  
(Technical Manager)



**CERTIFICATE OF ANALYSIS**

ALSEAL MARKETING SDN. BHD..  
Lot 2291, Jalan Kampung Baru,,  
Kg Baru Sungai Buloh,  
47000, Selangor DE.  
Tel : +603-6157 9698  
Attn :

Fax :

Certificate No : CCN18060187H03-0  
Sample Received Date : 28-Jun-2018  
Complete Analysis Date : 06-Jul-2018  
Date Issued : 06-Jul-2018

Sample Description : Product Name: Fire Retardant Silicone Sealant  
Product Code: AS-202  
Brand: Alseal

Analysis Results :

PARAMETER	ANALYSIS RESULTS	UNIT	STANDARD METHOD / TECHNIQUE / EQUIPMENT USED
VOC	43.83	g/L	USEPA method 24 under SCAQMD Rule 1168 (Architectural Sealants, <250g/L)

*ND* denotes not detected (< *Numeric number*) denotes detection limits

Remark : -



Cheng Pui Wah  
Senior Chemist  
B.Sc.(Hons),  
L/1828/6037/11



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Analysis Results :

PARAMETER	ANALYSIS RESULTS	UNIT	STANDARD METHOD / TECHNIQUE / EQUIPMENT USED
VOC	3.46	%	Air Resources Board Method 310 - Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products. (<4% (Portable Sealants and Caulking Compounds)

ND denotes not detected (< **Numeric number**) denotes detection limits

Remark : -



Cheng Pui Wah  
Senior Chemist  
B.Sc.(Hons),  
L/1828/6037/11