ALSEAL MARKETING SDN. BHD. Co.No.: 200301022720 (625140-D)
Lot 53, Jalan Industri 2/2, Rawang Integrated Industrial Park, 48000 Rawang, Selangor Darul Ehsan, Malaysia.
Tel: +603-6094 2088 **Fax:** +603-6099 2930 **Email:** info@alsealmarketing.com
Website: www.alsealmarketing.com
A member of NIPPON PAINT

Our reference: 11/I24/LTR/Y662

11th September 2024

Dear Valued Customer / Business Partners,

RE: "ALSEAL" AS-4003 Fire Rated MS Sealant - Low-VOC Compliant

This is to confirm that the volatile organic compound (VOC) content for **"ALSEAL" AS-4003 Fire Rated MS 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	50 g/L (All other architectural sealants)	21.28 g/L	PQ2402463 (Amendment 2)

Conclusion

Based on the results shown above, AS-4003 is able to meet the **low-VOC architectural sealant** requirement.

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.

Prepared by: Yap Wai Hoong
(Executive-Regulation & Compliance)

Verified by: Alex NG
(General Manager - Technical)

CERTIFICATE OF ANALYSIS

Work Order	: **PQ2402463**	Page	: 1 of 2
Amendment	: **2**		
Client	: **ALSEAL MARKETING SDN BHD**	Laboratory	: ALS Technichem (PG) Sdn. Bhd. (Formerly known as Merieux NutriSciences Malaysia Sdn. Bhd.)
Contact	: Admin	Contact	: Nazmiafiq Abdrashid
Address	: Lot.53, Jalan Industri 2/2, Rawang Integrated Industrial Park, 48000 Rawang, Selangor	Address	: Plot No. 256, Tingkat Perusahaan 5, Kawasan Perindustrian Perai 2, Perai Penang Malaysia 13600
E-mail	: ----	E-mail	: nazmiafiq.abdrashid@alsglobal.com
Telephone	: ----	Telephone	: +604 398 1609
Facsimile	: ----	Facsimile	: +604 399 1609
Project	: VOC Analysis	QC Level	: ALS Malaysia Standard Quality Schedule
Order number	: 4200007617	Date Samples Received	: 25-Jul-2024 15:00
C-O-C number	: ----	Date Analysis Commenced	: 08-Aug-2024
Sampler	: ----	Issue Date	: 11-Sep-2024 17:27
Site	: ----		
		No. of samples received	1
Quote number	: PQ2024VTECH0002: VOC ANALYSIS	No. of samples analysed	1

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Signatories

Signatories	*Position*
ChM. Zakiah Yahya	Senior Chemist (IKM No.: L/2571/7651/17)

*Please direct all technical queries to the laboratory (Reports.PQ@alsglobal.com)

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, ASTM, NIOSH and BS EN. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
~ = Indicates an estimated value.

- ALS TECHNICHEM prepares this Test Report based on the tests requested and on the specific sample(s) submitted for analysis. The significance of this Report is subject to the adequacy and representative character of the sample(s) and to the comprehensiveness of the tests requested or made. ALS TECHNICHEM assumes no responsibility for variations in quality or other characteristic of the product produced or supplied under conditions over which ALS TECHNICHEM has no control.
  ALS TECHNICHEM acts for the customer from whom the instructions to act have originated. No other party is entitled to give instructions, particularly on the scope of analysis or delivery of report or certificate, unless so authorized by the customer.
- ALS TECHNICHEM undertakes to exercise due care and skill in the performance of its analytical and consultancy services but no warranties are given and none may be implied directly or indirectly relating to ALS TECHNICHEM's test results, services or facilities. In no event shall ALS TECHNICHEM be liable to collateral, special or consequential damage.
- **Density and information of declaration of the exempted water and solvent are provided by client.**
- Result < LOR = Not Detected (ND)
- This report shall not be reproduced except in full without the written approval of the laboratory.
- **This sample is received at ALS Perai, Malaysia.**

ALS Technichem (PG) Sdn Bhd (Formerly known as Merieux NutriSciences Malaysia Sdn. Bhd.)
Plot No. 256, Tingkat Perusahaan 5,
Kawasan Perindustrian Perai 2,
13600 Perai, Pulau Pinang, Malaysia.
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Analytical Results

Sub-Matrix: **PRODUCTS**

				Sample ID	**PRODUCT CODE: AS-4003 PRODUCT NAME: FIRE RATED MS SEALANT**	**----**	**----**	**----**	**----**
				Sampling date/time	06-Aug-2024	----	----	----	----
Compound	*Method*	*LOR*	*Unit*		**PQ2402463-001**	**--------**	**--------**	**--------**	**--------**
Volatile Organic Compounds									
ø Volatile Organics Compounds (VOCs)	EPA Method 24-24A	0.1	g/L		21.28	----	----	----	----