inven
molecular systems

INVEN MOLECULAR SYSTEMS SENDIRIAN BERHAD

CORPORATE PROFILE

Inven Molecular Systems Sdn Bhd is dedicated to integrating ESG principles into every aspect of our operations. We prioritize sustainable practices by recycling industrial by-products, promoting environmental stewardship, and fostering community engagement. Our future green tech initiatives focus on developing innovative, eco-friendly materials that drive the construction industry towards a more sustainable and resilient future.

INVEN MOLECULAR SYSTEMS

TABLE OF CONTENTS

INVEN MOLECULAR SYSTEMS

ABOUT COMPANY

Inven Molecular Systems Sdn Bhd, established on 18th November 2020, is a leader in sustainable materials engineering, specializing in innovative green-asphalt & green-bitumen that completely replaces traditional bitumen as well as the conventional asphalt mixes. Our mission is to revolutionize the construction and infrastructure industries by providing sustainable material solutions that reduce waste and promote a circular economy.

Our commitment to sustainability and cutting-edge technology drives us to create eco-friendly products that set new benchmarks for environmental responsibility. With a focus on research and development, we continually improve our offerings and explore new ways to make construction more sustainable. Guided by ESG principles, Inven Molecular Systems is dedicated to leading the global transition to environmentally-friendly construction materials.

INVEN
MOLECULAR
SYSTEMS

CEO MESSAGE

Prof. Dr. Samson Soon

Innovation has always been at the heart of our mission; addressing today's challenges and creating value for the future. Our legacy of innovation dates back to our earliest endeavors in industrial recycling and environmental resource management. Where others perceived waste and cost, we recognize opportunity and value.

Since our inception, we have consistently pioneered advancements, positioning ourselves to thrive in and support a rapidly evolving global industry. As a company driven by innovation, we are dedicated to continuously generating value for our customers by discovering unique solutions to their business challenges, all while safeguarding our environment.

INVEN MOLECULAR SYSTEMS

CERTIFICATES & REGISTRATIONS

SURUHANJAYA SYARIKAT MALAYSIA
COMPANIES COMMISSION OF MALAYSIA

COMPANIES ACT 2016
(ACT 777)

CERTIFICATE OF INCORPORATION ON CHANGE OF NAME OF COMPANY

This is to certify that

IUKL MOLECULAR SYSTEMS SDN. BHD.
202001037446 (1393767-H)

which was, on the 18th day of November 2020, incorporated under the Companies Act 2016, as a private company, on the 10th day of November 2023, changed its name to

INVEN MOLECULAR SYSTEMS SDN. BHD.

and that the company is a private company, and is a company limited by shares.

Dated at **KUALA LUMPUR** this 01st day of February 2025.

DATUK NOR AZIMAH ABDUL AZIZ
REGISTRAR

SSM e-info

User ID: yenyeen

Printing Date: 01-02-2025

This certificate is generated from SSM e-Info Services on at 01-02-2025 15:58:33.

MENARA SSM@CENTRAL, NO. 7 JALAN SENTRAL 5, KUALA LUMPUR SENTRAL, 50623 KUALA LUMPUR.

Tel: 03-7721 8000 Fax: 03-7721 8001

INVEN MOLECULAR SYSTEMS

CERTIFICATES & REGISTRATIONS

IKRAM PAVES Sdn Bhd

PAVEMENT LABORATORY

STANDARDS MALAYSIA

Form : PLT-LAH-05
Issue No. : 2
Rev. No. : 3
Eff. Date : 24.10.2024
Page No. : 4 of 5

Request No :			Equipment Used		
Temperature (°c)		Pressure: mmHg	1 Balance No. 2	5	
Project:	IMS - Bio Bitumen		2 Oven No. 3c	6	
			3 Thermometer No 2	7	
			4 Water Bath No. 2	8	
			Type Of Sample Please Tick (✓)	Pavement Core Specimen	
				Laboratory Mixed Sample	✓
				Plant Mixed Sample	

Type of Mixture	IMS - Bio Bitumen	Mixing Temperature(°C)		Location	LAB IKRAM
Avrg. Spec. Gravity Aggregate		Compacting Temperature(°C)		Date Sample Received	14/11/2024
Spec. Gravity Bitumen		Test Temperature (°C)		Date Sample Tested	21/11/2024
Bitumen Grade				Laboratory Test No.	7 DAY

STANDARD TEST METHOD FOR MARSHALL STABILITY AND FLOW OF BITUMINOUS MIXTURES (ASTM:D 6927 - 22)

Sample Id	% Bitumen Content	Specification Hight (mm)	Weight (gm)			Bulk Volume (cc)	Specific Gravity		% Volume			% Voids			Stability (N)			Flow (mm)	Stiffness N/mm
			In Air	SSD	In Water		Bulk	Maximum Theoretical	Bitumen	Aggregate	Voids	Aggregate	Filled (Bitumen)	Total Mix	Correction Factor	Uncorrected Stability	Corrected Stability		
B		53.00	939.8	944.3	520.1	424.2	2.215								1.20	37222	44596	2.685	
C		54.81	944.6	950.1	524.9	425.2	2.222								1.16	41160	47860	2.929	
AVERAGE																			
SPECIFICATION																			

REMARK :

NOTE 1 : ASTM D6927 – 22, Clause 7

2. Report the **thickness** to the nearest 0.25mm.
3. Report the **individual and average values of Marshall Stability** (uncorrected & corrected) to the nearest 50N.
4. Report the **individual and average values of Marshall Flow** (uncorrected & corrected) in unit of mm directly.
5. Correction Factor (C) refers to Table 1 (Stability Correlation Factors)
6. Report the **individual and average values of Marshall Stability** (uncorrected & corrected) to the nearest 50N.
7. Report the **individual and average values of Marshall Flow** (uncorrected & corrected) in unit of mm directly.
8. Correction Factor (C) refers to Table 1 (Stability Correlation Factors)

Tested By	SUBKY	Verified By	MOHD NASIR
Signature		Signature	
Time	11.46 am	Time	12.30 PM
Date	21/11/2024	Date	21/11/2024

INVEN MOLECULAR SYSTEMS

OUR PRODUCTS

INVEN MOLECULAR SYSTEMS

IMS Green-Bitumen

Our IMS Green-Bitumen is a sustainable, high-performance alternative to conventional bitumen, offering unmatched cost-effectiveness and environmental benefits. It is engineered to provide exceptional bonding strength and durability, ensuring long-lasting infrastructure solutions.

Key Features:

- Multiple Grades: A range of grades equivalent to conventional bitumen, ensuring suitability for diverse applications.
- Sustainability: Significantly reduces carbon emissions and promotes circular economy practices.
- Compatibility: Works seamlessly with existing paving methods and equipment.
- Durability: Designed to withstand harsh environmental conditions while maintaining performance.

IMS Green-Bitumen supports innovative construction approaches and enables contractors to achieve cost savings and environmental goals without compromising on quality.

OUR PRODUCTS

INVEN MOLECULAR SYSTEMS

IMS Green-Asphalt (New Aggregate Material)

Our IMS Green-Asphalt is revolutionizing the paving industry with its unparalleled performance and sustainability. Mixed and paved at ambient temperatures, it eliminates the need for energy-intensive heating, significantly reducing carbon emissions and operational costs. Despite its lower production costs, IMS Green-Asphalt offers superior performance compared to conventional asphalt mixes.

Key Benefits:

- Cost Savings: No heating required for mixing, reducing energy and equipment costs.
- Eco-Friendly: Low carbon footprint and aligned with ESG principles.
- Enhanced Performance: Exceptional durability and flexibility for various applications.
- Specialized Mixes: Can be customized with crumb rubber waste, plastic waste, aramid fibers, and more for enhanced performance.

IMS Green-Asphalt provides a versatile and cost-effective solution for sustainable paving, all while maintaining compatibility with traditional paving methods.

OUR PRODUCTS

INVEN MOLECULAR SYSTEMS

IMS Green-Asphalt Reclaimed Asphalt Pavement (RAP)

Our IMS Green-Asphalt RAP is transforming the paving industry by incorporating reclaimed asphalt materials while maintaining high performance and sustainability. By reusing existing asphalt, it minimizes waste, conserves natural resource and significantly reduces environmental impact. Mixed and paved at ambient temperatures, it eliminates energy-intensive heating, cutting down on carbon emissions and operational costs. Despite using reclaimed materials, IMS Green-Asphalt RAP delivers durability and strength comparable to conventional asphalt mixes.

Key Benefits:

- Cost Savings: Lowers raw material and production costs by reusing existing asphalt, making it an economical choice for paving projects.
- Eco-Friendly: Low carbon footprint, minimizes waste and supports circular economy initiatives.
- Resource Efficiency: Incorporates Reclaimed Asphalt Pavement (RAP), reducing reliance on virgin materials and promoting sustainable construction practices.
- Durability & Performance: Retains high strength and flexibility, ensuring long-lasting pavement quality comparable to conventional asphalt.

IMS Green-Asphalt RAP is a sustainable and cost-effective paving solution, offering environmental benefits without compromising quality or compatibility with existing paving methods.

OUR GREEN-BITUMEN PLANT & FACILITIES

IMS Green-Bitumen Facility is the first of its kind in Malaysia, utilizing advanced biohybrid technology to produce high-performance, green-based bitumen. This groundbreaking facility transforms green-based materials into cost-effective, environmentally-friendly bitumen, meeting and exceeding industry standards.

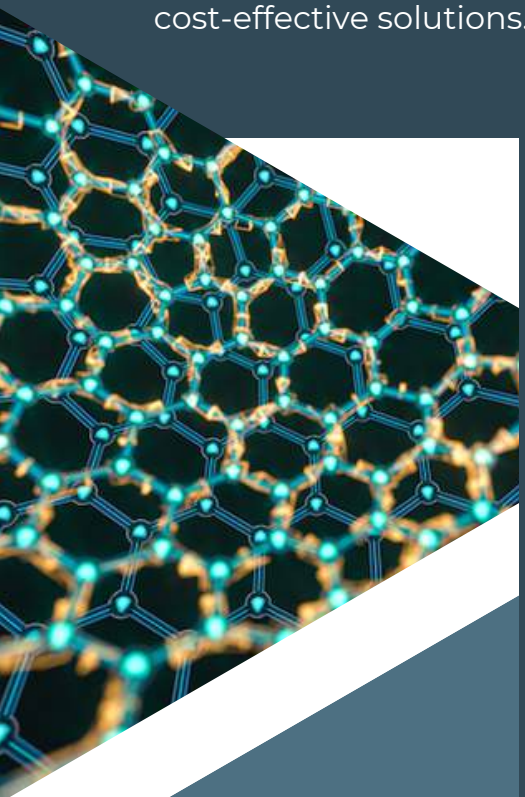
In addition, we have partnered with Universiti Sains Malaysia (USM) to research and further enhance this groundbreaking technology. Our collaboration focuses on developing advanced green-asphalt and green-bitumen solutions tailored to the unique challenges of modern infrastructure. This innovative technology is globally patented, solidifying our position as a leader in sustainable material engineering.

Our facilities also support the production of IMS Green-Asphalt, which is mixed and paved at ambient temperatures. This eliminates the need for energy-intensive heating during production, offering significant savings in energy and operational costs. Our advanced plants are equipped to handle specialized mixes, incorporating materials like crumb rubber waste, plastic waste, and aramid fibers to enhance performance for diverse applications. We are proud to be on track for certifications that validate our commitment to sustainability and quality, including: ISO Environmental Certification, MyHijau Certification, Eco Label Certification and pending laboratory testing reports, which are conducted in collaboration with Ikram Paves Sdn Bhd, to reinforce the quality and performance of our products.

INVEN MOLECULAR SYSTEMS

CORPORATE SOCIAL RESPONSIBILITIES

We integrate sustainability into our core business practices. Our production of IMS Green-Asphalt and IMS Green-Bitumen utilizes advanced green technologies and recycled materials, such as crumb rubber, plastic, and aramid fibers. By eliminating the need for energy-intensive heating and promoting the reuse of waste materials, we significantly reduce carbon emissions and contribute to a circular economy. These efforts align with our commitment to minimizing environmental impact while delivering high-performance, cost-effective solutions.



Beyond environmental sustainability, we actively engage with local communities through educational programs and partnerships that raise awareness about sustainable practices. Our initiatives aim to foster innovation and shared responsibility for a greener future. Guided by Environmental, Social, and Governance (ESG) principles, we are dedicated to advancing sustainable development and ensuring that our work benefits both our customers and the broader community.

INVEN MOLECULAR SYSTEMS

CORPORATE PARTNERSHIP OPPORTUNITY

We are eager to collaborate with forward-thinking premix plant operators and other industry leaders committed to sustainability and innovation. Together, we aim to transform the construction industry by providing high-performance, cost-effective, and eco-friendly solutions that meet the demands of modern infrastructure. Our innovative technologies, including IMS Green-Asphalt and IMS Green-Bitumen, deliver superior performance while significantly reducing carbon emissions and operational costs.

Our state-of-the-art facilities and advanced production processes eliminate the need for energy-intensive heating, making our solutions both environmentally and economically beneficial. Additionally, our green-asphalt mixes can incorporate recycled materials such as crumb rubber, plastic, and aramid fibers, enhancing durability and sustainability. Join us in leading the charge towards a greener future, positioning your business as a champion of Environmental, Social, and Governance (ESG) principles while advancing sustainable infrastructure development.

INVEN
MOLECULAR
SYSTEMS

INVEN MOLECULAR SYSTEMS

We are committed to leading the way in sustainable materials engineering and making a positive impact on the environment and society. Our innovative products and advanced technologies are designed to meet the highest standards of performance while promoting sustainability.

TEL
+603 7729 5912

EMAIL
info@invenms.com.my

WEBSITE
http://invenms.com.my

ADDRESS
B-5-9 & B-5-10, Gateway Corporate Suites,
No 1, Jalan Kiara, Mont Kiara,
50480 Kuala Lumpur.