



The Plastic Road Company





It's the end of the road for waste plastics

**At MacRebur®, our mission is to help solve the world's
three problems:**

- 1) To enhance the asphalt used to make our road surface
around the world.**
- 2) To help solve the waste plastic epidemic.**
- 3) To reduce CO2 emission.**

WHAT WE OFFER - ENVIRONMENTALLY

At Setia Bintang Engineering, in partnership with MacRebur, our mission is to focus on the environment and how we can make a positive difference. To that end we have undertaken numerous assessments of our products for their safety including gas production and leaching. Carbon is becoming extremely important in all industries. We have undertaken assessment to show the carbon impacts of our products.

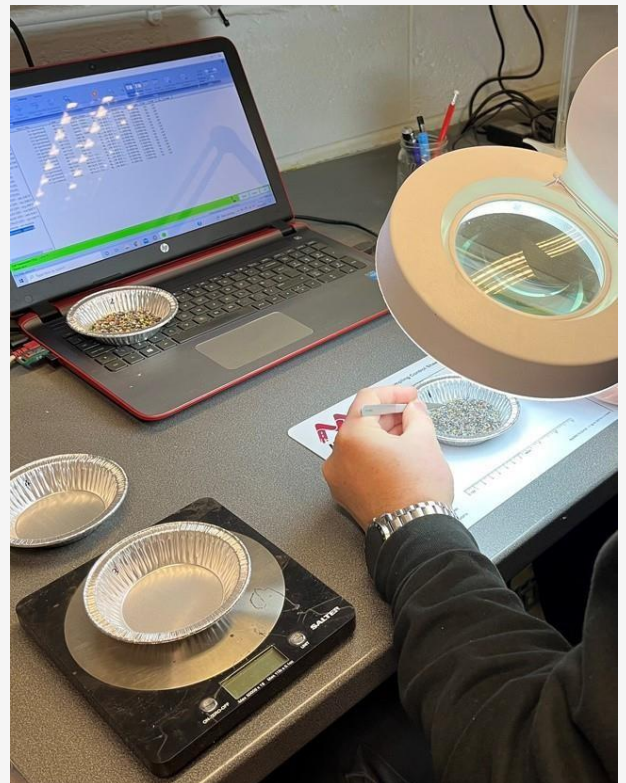
These assessments have been accredited to ISO 14064-3. As far as we know, we are the only additive supplier to have undertaken this assessment and accreditation. This gives our customers the comfort that we are not in any way “green washing” our products. It provides them with evidence that when they make 1 tonne of asphalt they save:

MR6: 7.55 KgCO₂e

No one else on the market can provide this level of clarity around their products.

WHAT WE OFFER-QUALITY

In the asphalt industry, as with all of the construction industry quality is key. At the heart of our operations, we employ an ISO 9001 certified Quality Management System. This system covers how we procure, how we manage our staff and crucially the quality control of our products. Consistency of product is vital for all of our operations. We form partnerships only with those who can supply us with the most consistent materials.



WHAT WE OFFER- KNOWLEDGE

Our team has huge experience of working in the waste, asphalt, bitumen and construction industries. We work with highly regarded academics across the globe and have access to, and commission, research at the forefront of this field. Our knowledge of how our products, and the polymers in general, work in various environments and with various other products is unsurpassed. We employ top technicians in this field and have an extensive laboratory continuously working to improve our knowledge and the use of our products. Those who join us get full access to these resources and the commercial benefits that come with it. This access includes help with trials, meeting with local regulators and administrators, and visits to asphalt plants. We also have extensive knowledge of the supply chain for our products. We are able to access the market and provide our customers with security that the products we provide will always meet the specification they require.

"MacRebur recycled plastic modification of bituminous binder for asphalt production resulted in a significant improvement in the fatigue life of asphalt mixtures, as well as an increase in the stiffness of modulus, measured by common UK laboratory test methods. It is recommended that UK and other pavement owners consider recycled plastic modification of asphalt for improved asphalt performance and more efficient pavement structures"

*Dr Greg White
University of the Sunshine Coast*



MR6 IS MANUFACTURED FROM A MIX OF RECYCLED POLYMERS, DESIGNED TO MODIFY ASPHALT AND REDUCE DEFORMATION FAILURES OR INCREASE STIFFNESS.

NO ADDITIONAL INFRASTRUCTURE REQUIRED TO USE MR6.

NO SPECIAL STORAGE REQUIREMENTS NEEDED.

MR6 IS DRY MIXED DIRECTLY AT THE ASPHALT PLANT.

NO ADDITIONAL FUME GENERATION.

Nick Burnett
MacRebur Limited
Burnstones
Waterbeck
Lockerbie
DG11 3HB

If telephoning ask for:
Kirsty McHarg

3 October 2018

Dear Nick

THE SUPPLY OF PLASTIC ADDITIVES TO IMPROVE THE QUALITY OF FINAL PRODUCTS IN THE ASPHALT MANUFACTURING INDUSTRY.

I refer to your report of June 2018 and subsequent correspondence seeking agreement that the manufacture of plastic additives for the asphalt industry from waste plastic (The MacRebur process) ceases to be waste for the purpose of the Waste Framework Directive.

End-of -Waste-Test

SEPA's consideration of your case is based on the approach set out in our published, "Is it Waste?" guidance. Our approach considers the established definitions and principles of the Waste Framework Directive (2008/98/EC) and takes into account the principles established by European and national case law. Decisions on whether a material remains waste are ultimately a matter for the courts to decide.

However, SEPA has carefully reviewed your submission and agrees, based on the information provided, that the MacRebur plastic processed in the manner described has ceased to be waste when sold and dispatched to market as a replacement for virgin plastic in the asphalt manufacturing industry.

This is based on the following conditions:

- The comparator products are virgin plastics. The Macrebur plastics must therefore be marketed as a replacement for these plastics.
- All waste plastic remains waste until it is discharged to the customer.
- Contamination levels of all specific plastic types used must be <2%.
- The processing of plastic is a waste activity and must be carried out under exemption criteria or be licensed as required by legislation.
- The storage of plastic either on site or off site remains waste and must be subject to exemption storage totals or be licensed.
- SEPA's agreement that MacRebur plastic has ceased to be waste is not an endorsement of the product and should not be used as such.

Cont'd /



Chairman
Bob Downes

Chief Executive
Terry A'Hearn

SEPA Stirling Office

Strathallan House, Castle Business Park,
Stirling FK9 4TZ

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www.sepa.org.uk • customer enquiries 03000 99 65 99

Nick Burnett
Lockerbie

3 October 2018

I trust the above is satisfactory. If you have any further questions, please feel free to contact me directly on 01292 292908.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Kirsty McHarg', written in a cursive style.

Kirsty McHarg
Senior Environment Protection Officer

*My***HIJAU** • MARK



This is to certify that

SETIA BINTANG ENGINEERING SDN. BHD. (1324092H)

Lot 4953, Jalan 1
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52100 Kuala Lumpur
WP Kuala Lumpur

has the rights to use the MyHIJAU Mark on the following item:

(Refer to Schedule Page for more details)

Compliance Category:

Performance Standard Compliance

Certification Scheme:

ISO 14064-3:2006(en) Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions

Certificate no.: MyHP00182/21

Issue Date: 21-06-2021

Expiry Date: 15-06-2024



Malaysian Green Technology And Climate
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www.greentechmalaysia.my

This is a computer generated certificate hence no signature is required.

This certificate is granted subject to the Terms and Condition of usage of MyHIJAU Mark certificate and label.

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SCHEDULE PAGE

Item #	Item Name	Brand	Model	Sector
MyHP00182/21-W001	Plastic Binder Extender	MacRebur	MR6	Waste

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