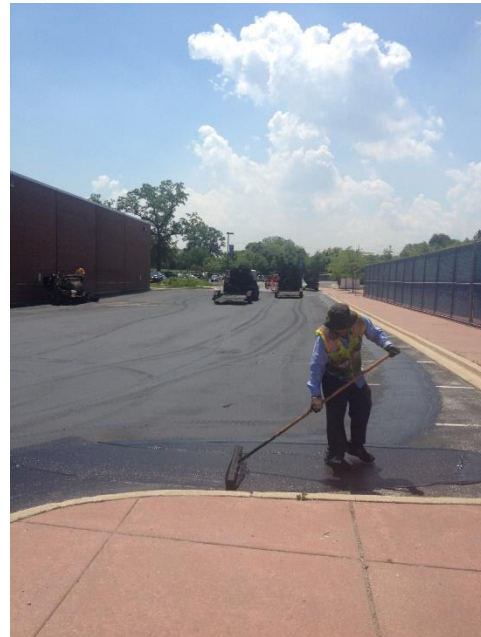


# Environmental Product Declaration For GSB-287VM, Asphalt Systems, Inc.


## Product Information

GSB-287VM is an emulsified, clay and Gilsonite -modified pavement sealer. The product rebinds the surface aggregate while sealing the surface binder, providing a cosmetically enhancing finish. It has been used extensively in both early stage pavement preservation, as well as reactive late stage applications for badly raveled and deteriorated roads and parking areas. It extends the life of asphalt pavements by an average of five years and is applied via squeegee.

The analysis shown here was performed in accordance with the Earthsure Environmental Product Declaration Program, using the product category rule for pavement preservation products. The analysis is based on a life cycle assessment of GSB-287VM, using data collected from November 2011 to December 2012. Environmental Product Declarations from other sources using different Product Category Rules may not be comparable to this one.




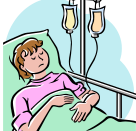







## Measurement Certification

Product Name	GSB-287VM
Product ID number(s)	N/A
Meets quality specification	California technical specification ABC123, ISSI Standards 143 and ARRA standard 987.
Product Category Rule	Earthsure 2011-01 Pavement Preservation Products
Product Category Rule Operator	Earthsure program, IERE PO Box 2449, Vashon WA 98070 earthsure.org 206-463-7430
This EPD is valid until	May 31, 2016
Validator Name	Tom Gloria
Validator Signature	
LCACP Registration Number	2008-03
Date	October 30, 2013



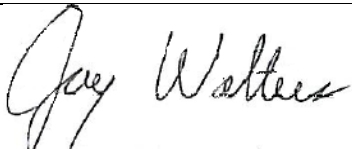
# The Life Cycle Environmental Impact of preserving one square meter of pavement for one year using GSB-287VM

		Raw Materials	Transport	Manu- facturing	Application and Use	Equivalent Units
	<b>Climate Change</b> 16	6.9	8.6	0.5	0.32	Grams CO <sub>2</sub>
	<b>Acidification</b> 8.8	5.1	2.9	0.24	0.63	10 <sup>-3</sup> Grams H <sup>+</sup>
	<b>Eutrophication</b> 9.1	5.2	2.9	0.069	0.89	10 <sup>-3</sup> Grams N
	<b>Human Toxicity</b> 7.9	6.6	1.3	0.019	0.058	10 <sup>-9</sup> CTUh
	<b>Ecotoxicity</b> 0.14	0.11	0.022	2.7E-4	8.8E-4	CTUe
	<b>Photochemical Smog</b> 3.0	0.92	1.4	0.29	0.39	Grams O <sub>3</sub>
	<b>Fossil Fuel Depletion</b> 0.70	0.59	0.10	0.0032	0.0072	MJ
	<b>Mineral Resource</b> clay 5247 Iron ore 9.8	5245 8.8	0 0	0 0	1.2 0.98	Milligrams minerals
	<b>Water Resource</b> 0.11	0.049	0	0.0048	0.055	Liters water

## More information on GSB-287VM

GSB-287VM contains these hazardous materials	
CAS Number	Name
1333-86-4	Carbon black
To the best of our knowledge, GSB-287VM contains no endocrine disrupters as defined by the European Commission.	
Percentage of primary technosphere data	4.4%
Dates of data collection	November 2011- December 2012

## Product Owner Certification

I have personally examined the conditions and the individuals performing this analysis and to the best of my knowledge, these representations are true and accurate.	
Name	Jay Walters
Date	November 7, 2013
Signature	

## Disclaimers

The analyses presented here were performed with all due care, but the user should realize that they represent the average results measured under standardized conditions and the actual environmental performance will vary depending on the particular application, the climate, the traffic type and intensity and other factors beyond the control of Asphalt Systems, Inc.

The results shown here pertain only to the referenced product category rule. They should not be compared directly to results using a different product category rule.

For more information, contact:

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