

Environmental Product Declaration For GSB-88, Asphalt Systems, Inc.



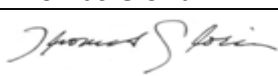
Product Information

GSB-88 is an emulsified, gilsonite-modified pavement sealer and rejuvenator. The product rebinds the surface aggregate while sealing and rejuvenating 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, parking areas, and airfield runways and taxiways. It extends the life of asphalt pavements by an average of five years. It is applied with standard asphalt emulsion application equipment, generally asphalt distributors. In some cases it may be advisable to broadcast a very light application of sand over the still wet GSB-88.




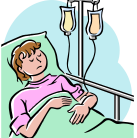
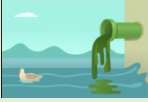






The analysis shown here was performed in accordance with the Earthsure Environmental Product Declaration Program, using the product category rule for pavement preservation products. The analysis is based on a life cycle assessment of GSB-88, using data collected from November 2009 to November 2010. Environmental Product Declarations from other sources using different Product Category Rules may not be comparable to this one.

Measurement Certification

Product Name	GSB-88
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	Thomas Gloria
Validator Signature	
LCACP Registration Number	2008-03
Date	14 May 2012

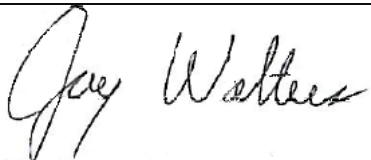
The Life Cycle Environmental Impact of preserving one square meter of pavement for one year using GSB-88

		Raw Materials Transport		Manu- facturing	Application and Use	Equivalent Units
	Climate Change 36	14.2	5.1	16.3	0.09	Grams CO ₂
	Acidification 18	8.9	1.7	7.2	0.03	Milligrams H ⁺
	Eutrophication 16	12.4	1.7	1.4	0.2	Milligrams N
	Human Toxicity 10.1	7.4	0.2	2.3	0.2	10 ⁻¹³ CTUh
	Ecotoxicity 9.9	8.3	0.5	1.1	0.01	10 ⁻⁵ CTUe
	Photochemical Smog 3.4	1.9	0.8	0.7	0.01	Grams O ₃
	Non-renewable Energy 1.6	1.2	0.1	0.3	0.002	MJ primary
	Mineral Resource Sand 1.1	1.01	0	0.02	0.1	Micrograms minerals
	Iron 24.4	21.4	0	0.2	2.8	Milligrams minerals
	Water Resource 0.12	0.02	0	0.02	0.08	Liters water

More information on GSB-88

GSB-88 contains these hazardous materials	
CAS Number	Name
68476-33-5	Fuel Oil
To the best of our knowledge, GSB-88 contains no endocrine disrupters as defined by the European Commission.	
Percentage of primary technosphere data	18.5%
Dates of data collection	November 2009- November 2010

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	October 24, 2011
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

Mailing Address

Asphalt Systems, Inc.
PO Box 25511
Salt Lake City, UT 84125

Phone (801) 972-2757

Email: phil@asphaltsystemsinc.com

www.asphaltsystemsinc.com

Physical Address

Asphalt Systems, Inc
2774 W 1500 S.
Salt Lake City, UT 84104