

GreenDots Certification Application Criteria for Roadbond EN 1

Criteria Elements

Sustainability:

1. Roadbond EN 1 contributes to a sustainable environment in a number of prominent ways. First, the primary active ingredients are derived from waste citrus oils (see enclosure 1 – MSDS). Secondly, use of this product decreases the demand for other products that are either in short supply or are less environmental friendly. In addition, the manufacture and application of this product requires significantly less water and energy than competitive products.
2. Roadbond EN 1 reduces carbon emissions because it can be transported to the job site in the concentrated form and diluted on site. Typical delivery can be made in a pickup truck rather than the 16 wheel tanker trucks required to deliver competitive products. Furthermore, the product can be added directly into a water spray truck (typically 3000 gallon tank trucks) and sprayed directly onto the prepared road bed or construction site. Several 16 wheel tanker trucks are required to apply cement or lime treatment to the same area treated by one water tank spray application of Roadbond EN 1. (see enclosure 2)
3. Roadbond EN 1 reduces pollutions levels compared to competitive products in several significant ways. As noted in question number 1 above, Roadbond EN 1 is primarily derived from waste citrus oils. The final product is environmentally friendly and less hazardous than other competitive products now in use. (See Enclosure 3 --laboratory test results). Furthermore, the addition of Roadbond EN 1 does not add undesirable chemical contaminants to the environment and laboratory test results indicate it may actually bind in place toxic metals that are already present in the soil. Not only does Roadbond EN 1 replace or reduce the use of less environmentally friendly products, it makes beneficial use of what otherwise would be a waste product. Another advantage is that it can be used in conjunction with fly ash thereby enabling beneficial use of a second waste product generated by coal and lignite power plants. Finally Roadbond EN 1 is significantly less expensive to manufacture and use than competitive products currently in use.
4. Roadbond EN 1 minimizes waste by-products because there are virtually no waste by-products. The product is transported from the supplier to the job site as concentrate in recyclable five gallon containers. The product is diluted directly into a water tank truck for direct application to

the sub grade soil at project locations. Optimum moisture can be achieved to stabilize properly prepared soils with minimal to no run off.

5. Roadbond EN 1 makes use of natural resources by utilizing by-products of citrus waste. It can also be used in conjunction with fly ash and, therefore, makes beneficial use of a second waste product generated by coal and lignite power plants.
6. Roadbond EN 1 raises the quality of life for the consumer by being more environmentally friendly than competitive products while substantially reducing construction costs. The compressive strength of the sub-grade soils stabilized with this product have tested as good or better than the same soils stabilized with competitive products (see Enclosures 4 -- material testing results).

Practicality

7. Roadbond EN 1 fits into sustainable infrastructure because it is abundant and economical to produce. It can be used in conjunction with current soil stabilizers on essentially all soil bases and/or be used as a stand alone stabilizer for many soils.
8. This product should integrate into sustainable distribution without difficulty because the component raw materials are abundant and readily available. C.S.S. Technology, Inc. can easily increase production to meet greater demand. Since the product is distributed in the concentrated form, distribution is simple and economical.
9. Roadbond EN 1 encourages sustainable consumer behavior because of its ease of application and lower costs compared to available competitive products. Once consumers gain confidence in this product's reliability, ease of application, and cost savings application they should willingly become repeat customers.
10. C.S.S. Technology, Inc. is in the process of developing sustainable procurement policies by expanding its distributorships. It currently has distributors in the USA, Canada, Mexico, China, and Poland and is able to meet current demands easily with existing manufacturing capacity. In addition the current facility can be easily expanded to meet any foreseeable increase in demand. Raw materials are plentiful, readily available, and no shortages are expected.
11. The environmental impact of Roadbond EN 1 has been determined in several ways. The performance has been evaluated by several materials testing labs (see enclosed test results). Soils treated with this product and competitive products have been tested in an environmental

lab and additional testing is ongoing (see enclosure 2 for test results). In addition the product has been applied in residential neighborhoods with no complaints of any adverse affects to residential plants or lawns.

12. C.S.S. Technology, Inc. has pursued aggressive third party testing in an effort to establish accreditation for Roadbond EN 1. However, this is the initial accreditation request for Roadbond EN 1.

Innovation

13. Roadbond EN 1 makes best use of renewable and alternative energy technology because it requires significantly less energy for its production and application than competitive products currently in use (see enclosure 2 for comparison)
14. Since Roadbond EN 1 is prepared from abundant and readily available raw materials and requires minimal energy to produce, it meets sustainable manufacturing and operating technologies requirements..
15. NA
16. Roadbond EN 1 meets the requirements for sustainable low carbon technology because the primary active ingredient of Roadbond EN 1 is derived from citrus waste, a natural product that would otherwise be a waste disposal problem. Energy requirements for its production and application require significantly less energy resources than competitive products (see enclosure 2 for comparison).

Availability

17. How widely accessible is your product? Roadbond EN 1 is currently produced at one plant outside of Granbury, Texas. The plant currently has no problem meeting the demand and has plenty of room to expand. The product is currently being used in the USA, Canada, Mexico, Poland and China.
18. How do your pricing strategies encourage consumers to buy your product? The product is reasonably priced enabling this product to be significantly less expensive than competitive products. The cost savings relative to competitive products should stimulate strong consumer interest to use Roadbond EN 1 (see enclosure 2).
19. How is best use of your product promoted to consumers and stakeholders? C.S.S. Technology, Inc. currently promotes Roadbond EN 1 on its website and by direct mail.