

SS 698:2023
(ICS 65.080; 91.100.30)

SINGAPORE STANDARD

**Code of practice for the production and
application of biochar**



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Foreword

This Singapore Standard was prepared by the Working Group on Biochar set up by the Technical Committee on Circularity of Materials under the purview of the Environment and Resources Standards Committee.

The objective of the standard is to have a streamlined process control for consistent product quality of locally-produced biochar and guidance for product use and environment and water resources protection.

It is presupposed that in the course of their work, users will comply with all relevant regulatory and statutory requirements. Some examples of relevant regulations and acts are listed in the Bibliography. The Singapore Standards Council and Enterprise Singapore shall not be responsible for identifying all of such legal obligations.

In preparing this standard, reference was made to the following publications:

1. International Biochar Initiative Standardized Product Definition and Product Testing Guidelines for Biochar 7 that is Used in Soil. BI-STD-2.1. 3 November 2015.
2. Code of Practice for the Sustainable Production and Use of Biochar in Australia and New Zealand, Revision Draft. 2 June 2020.
3. EBC (2012-2023) 'European Biochar Certificate – Guidelines for a Sustainable Production of Biochar.' Carbon Standards International (CSI), Frick, Switzerland. Version 10.3 from 5th Apr 2023

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Acknowledgement is made for the use of information from the above publications.

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Code of practice for the production and application of biochar

0 Introduction

This Singapore Standard was developed to address the crucial need of the local biochar industry for a benchmark to compare with other local producers and across international markets, which can reduce the time-to-market. It can serve as a tool to assess biochar quality and as a fundamental quality assurance tool for making informed purchasing and utilisation decisions.

The successful application of biochar will contribute to the move towards the 'zero waste' goal through the implementation of a circular economy model. Furthermore, there is an opportunity to export biochar that contributes to global sustainability.

1 Scope

1.1 This Singapore standard provides guidelines for the production and subsequent application of biochar in:

- agriculture;
- horticulture;
- anaerobic digestion;
- construction materials
- activated carbon.

1.2 It provides guidance on the sampling and test methods to be used to ensure the quality requirements of biochar are met. The standard includes testing for leachate from biochar into the environment, including testing for heavy metal uptake in plants and food crops.

1.3 It covers guidelines for the production, storage, distribution and marketing of biochar. It is applicable to organic materials from feedstock (e.g. horticultural waste, food waste, sewage sludge, animal manure) that have undergone treatment by pyrolysis or gasification.

2 Normative references

There are no normative references in this standard.