

CERTIFICATE OF ANALYSIS

Description : Coconut Briquette Charcoal
Manufacturer / Shipper : PT. Argia Sagara Group
Tugaran No.99 RT
002/012,Sindanglaya,Cipanas,
West Java, Indonesia
Sample Weight : 3.00 kgs
Received Date : 22 Oktober 2023
Date of Analysis : 23 Oktober 2023

Analysis


Analysis were performed at PT Carsurin Semarang Laboratory (accreditation by KAN / National Accreditation Committee – Indonesia for ISO 17025:2017 Cert No. LP-415-IDN) in accordance with ASTM Standard. The results of our analysis are as follows:

Parameter	Unit	Results		Method
		Wet Basis	Dry Basis	
Moisture	Pct	8.40	-	ASTM D1762-84 (REAPPROVED 2021)
Ash Content	Pct	2.02	2.21	ASTM D1762-84 (REAPPROVED 2021)
Volatile Matter	Pct	11.30	12.34	ASTM D1762-84 (REAPPROVED 2021)
Fixed Carbon	Pct	78.28	85.45	By Calculation

This certificate refers solely to the analysis in accordance with the details described herein and does not certify any other matter, and is issued without prejudice.

Jakarta, 23 Oktober 2023

PT. CARSURIN



CARSURIN
1968
Dede Jemmi Supriadi
Head of Laboratory

For verification of authenticity of certificate or reports, scan the secure QR code using the Validator App or visit verify.carsurin.com



This report is made and issued by the Company upon the Principal/Applicant's request and the analysis contained therein reflects the Company's findings on the sample(s) submitted by Principal/Applicant and/or sample(s) drawn by the Company at the time and place of performing the inspection/testing only. Company shall not be liable for any changes to the results herein due to effects of weather, transport, storage or other factors outside Company's control. Furthermore, the Company shall not be responsible to any parties on any business, financial and/or legal consequences for any transaction by using this report/analysis. Any unauthorised alteration or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This document cannot be reproduced except in full, without prior approval of the Company.

SUBJECT

Evaluation of "Coconut Briquette Charcoal" Sample for Self-Heating Substance Test

CUSTOMER

PT. Argia Sagara Group
Tugaran No.99 RT
002/012,Sindanglaya,Cipanas,
West Java, Indonesia

DATE OF RECEIVED SAMPLE

22 Oktober 2023

DESCRIPTION OF SAMPLE

Coconut Briquette Charcoal

DATE OF TESTING

22 Oktober 2023 up to 23 Oktober 2023

The below findings are based on sample/s only, which is/are submitted or supplied by client. This report is valid within 90 days from the date of testing.



This report is made and issued by the Company upon the Principal/Applicant's request and the analysis contained therein reflects the Company's findings on the sample(s) submitted by Principal/Applicant and/or sample(s) drawn by the Company at the time and place of performing the inspection/testing only. Company shall not be liable for any changes to the results herein due to effects of weather, transport, storage or other factors outside Company's control. Furthermore, the Company shall not be responsible to any parties on any business, financial and/or legal consequences for any transaction by using this report/analysis. Any unauthorised alteration or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This document cannot be reproduced except in full, without prior approval of the Company.

METHOD OF TEST

The self heating substances test was performed according to United Nations "Recommendations on the Transport Dangerous Good, Manual of Test and Criteria" (33.4.3.3.1) as per revised UN test manual 7th edition 2019. Self heating substances, using method of UN 33.4.6 "Test N.4: Test method self-heating substances".

A consignment of carbon if it passes the tests for self-heating substances as reflected in the United Nations Manual of Tests and Criteria (see 33.4.3.3), and is accompanied by a certificate from a laboratory accredited by the competent authority, stating that the product to be loaded has been correctly sampled by trained staff from that laboratory and that the sample was correctly tested and has passed the test.

The sample received was placed into a 100 mm cubic mesh sample container made of stainless steel. The container was then hung at the centre of the oven. The oven temperature was slowly raised to 140° C and kept constant for 24 hours. The temperature at the centre of the sample and temperature between the container and oven were recorded continuously.

RESULT

Table 1: Analysis result for "Coconut Briquette Charcoal" sample

Sample	Oven Temperature (°C)	Cube Size (mm)	Maximum Temperature Reached (°C)	Result
Coconut Briquette Charcoal	140	100	140.5	Negative

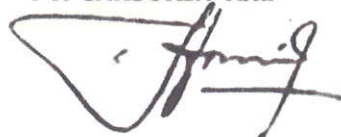
The above result showed that the "Coconut Briquette Charcoal" sample shall not be classified in self heating substances of division 4.2 – Substance liable to spontaneous combustion .

Remark

The temperature profiles were enclosed in pages 3 for your references. T1 represented temperature in the center of the sample. T2 represented temperature between the container and the oven wall.

Jakarta, 23 Oktober 2023

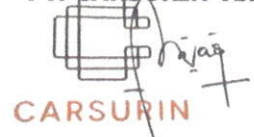
PT. CARSURIN Tbk.



Dede Jemmi Supriadi

Head of Laboratory

PT. CARSURIN Tbk.



Amran Lesmana

Head of Technical Charcoal

For verification of authenticity of certificate or reports, scan the secure QR code using the Validator App or visit verify.carsurin.com

This report is made and issued by the Company upon the Principal/Applicant's request and the analysis contained therein reflects the Company's findings on the sample(s) submitted by Principal/Applicant and/or sample(s) drawn by the Company at the time and place of performing the inspection/testing only. Company shall not be liable for any changes to the results herein due to effects of weather, transport, storage or other factors outside Company's control. Furthermore, the Company shall not be responsible to any parties on any business, financial and/or legal consequences for any transaction by using this report/analysis. Any unauthorised alteration or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This document cannot be reproduced except in full, without prior approval of the Company.



**24 Hours Temperature Profile "Coconut Briquette Charcoal" at 140° C
(100mm cube)**

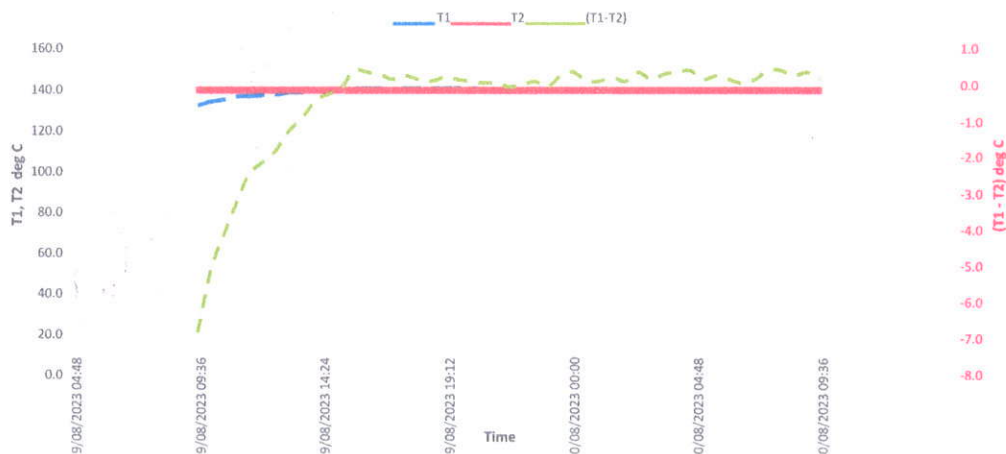
Start Time : 22-Okt-23 15:30:00
 Stop Time : 23-Okt-23 15:30:00
 Elapsed Time : 24:00:00
 Interval : 00:30:00
 Total readings : 49
 Thermocouple Type : K
 Scaling : (None)

Temperature	Max Time Stamp	Max	Average	Min	Min Time Stamp
T1	09/08/2023 18:00	140.5	139.4	131.9	09/08/2023 09:30
T2	09/08/2023 18:00	140.4	139.9	138.8	09/08/2023 09:30
T1-T2	09/08/2023 15:30	0.4	-0.4	-6.8	09/08/2023 09:30

Remark:

T1 represented temperature in the centre of the sample. T2 represented temperature between the container and the oven wall.

**Performance Record Temperature - Self Heating Test
(Coconut Briquette Charcoal - PT. Argia Sagara Group)**



This report is made and issued by the Company upon the Principal/Applicant's request and the analysis contained therein reflects the Company's findings on the sample(s) submitted by Principal/Applicant and/or sample(s) drawn by the Company at the time and place of performing the inspection/testing only. Company shall not be liable for any changes to the results herein due to effects of weather, transport, storage or other factors outside Company's control. Furthermore, the Company shall not be responsible to any parties on any business, financial and/or legal consequences for any transaction by using this report/analysis. Any unauthorised alteration or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This document cannot be reproduced except in full, without prior approval of the Company.



Please note that this Report is issued under the following terms:

1. This report applies to the sample of the specific product/equipment given at the time of its testing/calibration. The results are not used to indicate or imply that they are applicable to other similar items. In addition, such results must not be used to indicate or imply that PT. CARSURIN Tbk. approves, recommends or endorses the manufacturer, supplier or user of such product/equipment, or that PT. CARSURIN Tbk. in any way "guarantees" the letter performance of the product/equipment. Unless otherwise stated in this report, no test was conducted to determine long term effects of using the specific product/equipment.
2. The sample/s mentioned in this report is/are submitted or supplied by customer.
3. Nothing in this report shall be interpreted to mean that PT. CARSURIN Tbk. has verified or ascertained endorsement or marks from any other authority or bodies that may be found on that sample.
4. This report shall not be reproduced wholly or in parts and no reference shall be made by the client PT. CARSURIN Tbk. in any advertisements or sales promotion
5. Unless otherwise stated, the tests were carried out in PT. CARSURIN Tbk. Jl. Telaga Bodas Raya No. 88 A Karangrejo, Gajahmungkur, Semarang or email : charcoal@carsurin.com



This report is made and issued by the Company upon the Principal/Applicant's request and the analysis contained therein reflects the Company's findings on the sample(s) submitted by Principal/Applicant and/or sample(s) drawn by the Company at the time and place of performing the inspection/testing only. Company shall not be liable for any changes to the results herein due to effects of weather, transport, storage or other factors outside Company's control. Furthermore, the Company shall not be responsible to any parties on any business, financial and/or legal consequences for any transaction by using this report/analysis. Any unauthorised alteration or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. This document cannot be reproduced except in full, without prior approval of the Company.