

Analytical Report

Comgoed biomasse B.V.

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Reportnr. : **1101160 version 1**
Product recognized as : Hout/Wood/Bois/Holz/Madera
Product Specification : ENplus A1 pellets
Reference : Comfort Pellets augustus 2020
AWB / BarCode : 243943901
Packing : Plastic, ambient
Sample Type : BIS

Disponent Number :
Sampling Date : 21-Aug-2020
Samplesize (kg) : 0
Sealed / Seal Code : No /
Sample Arrival Date : 25-Aug-2020 16:00
ReportDate Version : **01-Sep-2020 11:21**

Composition Determination

Parameter	Result (as received)	Result (on dry)	Result (as det)	Result (dry ash free)			
Total Moisture	6,45				%		O
Moisture Airdry			7,98		%	Q	R
Ash	0,27	0,28	0,26		%	Q	R
Volatile matter incl. moisture.			86,76		%	Q	R
Volatile matter	80,09	85,61	78,77	85,85	%		
Fixed Carbon	13,20	14,11			%		
Gross Calorific Value	4593,8	4910,5	4518,5	4924,5	kcal/kg	Q	R
	19,23	20,56	18,92	20,62	GJ/mt		
Nett Calorific Value (cV)	8268,8	8838,9	8133,3	8864,1	B.T.U.'s/Lb	Q	
	4281,6				kcal/kg		
	17,93				GJ/mt		
	7706,8				B.T.U.'s/Lb		
	5,0				kWh/kg		
Nett Calorific Value (cP)	17,85				GJ/mt	Q	
Emissionfactor CO2 (cV)	99,13				t CO2/TJ		
Emissionfactor CO2 (cP)	99,55				t CO2/TJ		
Hydrogen	5,62	6,01	6,42	6,02	%	Q	R
Carbon	48,46	51,80	47,67	51,95	%	Q	R
Nitrogen.	< 0,05	< 0,05	< 0,05	< 0,05	%	Q	R
S. (Sulfer)	< 0,010	< 0,010	< 0,010	< 0,010	%	Q	R
Oxygen (by difference)				42,010	%		

Preparation

Common

Parameter	Result (as received)	Result (on dry)	Result (as det)				
Preparation sample	B-wood preparation according NEN EN 14780 and NEN EN 15443					Q	R

Other Analysis

Common

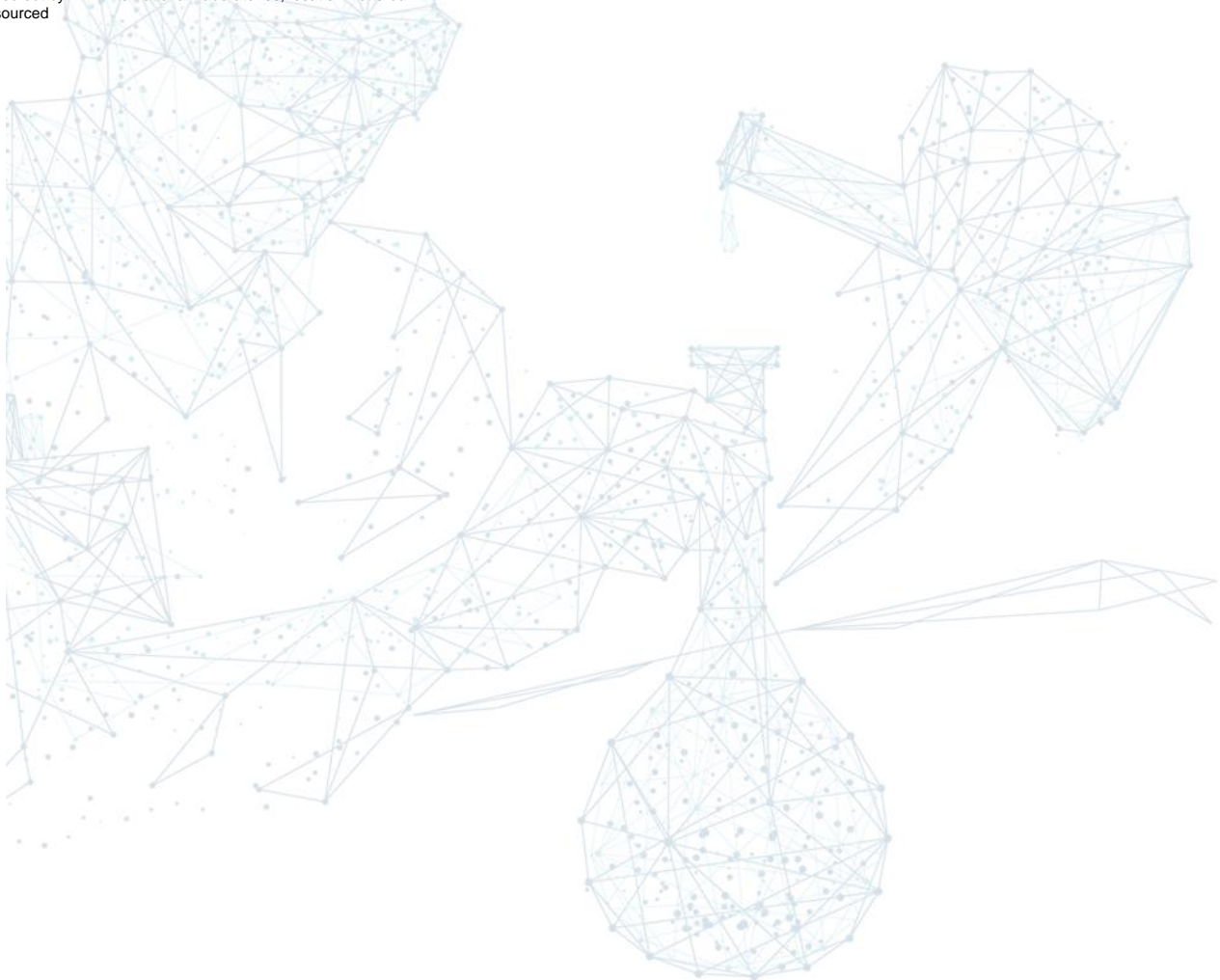
Parameter	Result (as received)	Result (on dry)	Result (as det)				
Mechanical Durability			99,3	%		Q	R

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Q - Analyses ISO 17025 accredited by RvA (ILAC)
R - Carried out by TLR International Laboratories, location Rotterdam
O - Outsourced



Demanded 25-Aug-2020 by Comgoed biomasse B.V.
Analyses according to annex
Drs. ing. H. Janssens Director TLR International Laboratories



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ANNEX

Method Descriptions

Composition Determination

Common

Method Description

Determination of ash; gravimetric method

Coal: NEN-ISO 1171 Biomass: NEN-EN15403; Secondary bio fuels: NEN-EN- ISO 18122

Determination of carbon (C), nitrogen (N), hydrogen (H) with the element analyser

Coal : NEN-ISO29541, Biomass: NEN-EN-ISO 16948 : Secondary bio fuels NEN-EN 15407

Determination of gross calorific value by bombcaloric method and calculation of net calorific value

Coal: NEN-ISO 1928, Solid Biofuels NEN-EN-ISO18125; secondary biofuels NEN-EN15400

Determination of moisture in the analyse sample; gravimetric method

Coal: NEN-ISO 11722;Biomass: NEN-EN-ISO 18134-3; Secondary bio fuels : NEN-EN15414-3

Determination of Sulphur (S); NEN-EN-ISO 16994

Determination of total moisture in the sample; gravimetric method

Coal:NEN-ISO-589 MB biomasss: NEN-EN-ISO 18134-1; Secondary bio fuels : NPR-CEN/TS 15414-1

Determination of volatile matter content; gravimetric method

Coal: NEN-ISO 562; Biomass: NEN-EN-ISO 18123; secondary biofuels: NEN-EN 15402

Method Code

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Other Analysis

Common

Method Description

Determination of mechanical durability of pellets

Method Code

NEN-EN-ISO 17831-1

Abbreviations:

acc: in accordance with

eq: Equivalent to

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