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## **Standards and Certificates for Charcoal and Charcoal Briquettes in the Function of Harmonization of their Quality and Market Development**



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# Standards for charcoal and charcoal briquettes



→ Fixed carbon  
→ Ash content  
→ Moisture content



- German DIN 51749;
  - French AFNOR NF B 55101;
  - Belgian NBN M 11-001:
  - Swedish SIS 1029;
  - Russian GOST 7657-84 and
  - Serbian JUS.D.B9.020.
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2005

**EN 1860-2**

**GOST 7657- 84**

**SRPS D.B9.020**



Standard of the EU -----EN 1860-2



**Fixed carbon**  
**Ash content**  
**Moisture content**

min 75% by mass  
not exceed 8%  
shall not exceed 8%

min 60% by mass  
max 18%  
shall not exceed 8%

All particles shall have the size between 0-150 mm:

- no more than 10% may exceed 80 mm in size;
- at least 80% shall be greater than 20 mm;
- 0-10 mm shall not exceed 7%.

- the granules less than 20 mm shall not exceed 10%.

**- classes of quality**  
**- caloric value**  
**- wood species**

**for charcoal and charcoal briquettes  
are not determined by standard EN 1860-2**



# Russian standard GOST 7657-84



	A		B		C
	Best quality	First quality	First quality	Second quality	
Fixed carbon	90%	78%	88%	77%	67%
Ash content	2.5%	3.0%	2.5%	3.0%	4.0%
Moisture content	6%	6%	6%	6%	6%

Groups	Wood species	
I	birch, beech, ash, hornbeam, elm, walnut, maple	*I*-----A
II	pine, fir, cedar, spruce, larch	*I-II*-----B
III	aspen, alder, linden, poplar, willow	*I-II-III*-----C

## Additional requirements according to the Russian standard

- density:

(only for A quality ---for both best and first A quality)

- portion of non-charred logs:

(absence for both A best and B first quality--

---- 2% for all other classes)

- mass of 1 dm<sup>3</sup> of charcoal, in grams:

not less than 210g for A quality, both best and first A quality, for other quality is not standardized.

## Serbian standard SRPS D.B9.020

	I class		II class
	Retort charcoal	Forest charcoal	Dust and charcoal residues
Fixed carbon, % at least	80	80	72
Ash content, % at most	3	5	18
Moisture content, % at most	7	10	15
Non-charred particles, %, at most	1	1	2
Other ingredients (soil, sand, etc.), %, at most	absence	1	5

Quality class I contains charcoal which have particles diameter over 3 cm on producer's loading date and no more than 5% of particles with diameter smaller than 3 cm.

## Data on the packaging

- ✓ designation of the producer and its brand mark;
- ✓ designation of the product, its mark, sort;
- ✓ net weight;
- ✓ production date;
- ✓ designation of a standard.



Figure 1: Polypropylene bags



Figure 2: 3 layer paper bags





# CHARCOAL AND CHARCOAL BRIQUETTES QUALITY CERTIFICATES

## Certificates of EU



DIN testing



DINplus quality

## Russian certificate



Mark of Conformity according  
to GOST-R certification scheme



“DIN testing” and  
“DINplus” mark on  
packaging of charcoal

# THANK YOU FOR YOUR ATTENTION!

