



MAKROchem S.A.  
ul. M. Rapackiego 2  
20-150 Lublin, Poland

tel: +48 81 747 88 19, 740 70 74, 740 67 05, 444 15 01, 444 15 02  
fax: +48 81 747 06 02,  
e-mail: mc@makrochem.com  
www: www.makrochem.com

## MATERIAL SPECIFICATION

### Carbon black N683

PROPERTY	Target	Tolerance	ASTM test method
1. Iodine adsorption, g/kg	35	± 5	D 1510
2. Oil absorption number, cm <sup>3</sup> /100g	133	± 8	D 2414
3. Sieve residue 45 µm (No.325), %		≤ 0.05	D 1514
4. Sieve residue 500 µm (No.35), %		≤ 0.001	D 1514
5. Heating loss, %		≤ 1.5	D 1509
6. Ash content, %		≤ 1.0	D 1506
7. Pour density, kg/m <sup>3</sup>	355	± 25	D 1513
8. Fines content, %		≤ 7	D 1508
9. pH value		7 ÷ 10	D 1512
10. Sulfur content, %		≤ 2.0	D 1619
11. Individual pellet hardness (average of 20), g		≤ 55	D 5230
12. Individual pellet hardness (max of 20), g		≤ 85	D 5230
13. Toluene discoloration, %		≥ 80	D 1618
14. BET surface area (NSA), m <sup>2</sup> /g	37	± 5	D 6556
15. External surface area (STSA), m <sup>2</sup> /g	34	± 5	D 6556
16. Oil absorption number of compressed sample, cm <sup>3</sup> /100g	85	± 5	D 3493