

## Reference material of nanoporous aluminium oxide ( $Al_2O_3$ CO)



### IT IS DESIGNED FOR

calibration of measuring instruments, control the accuracy of the measurement results of sorption characteristics of nanoporous materials.

### IT CAN BE APPLIED

for verification of measuring instruments and certification of methods for measuring the sorption characteristics of nanoporous materials, for testing the measuring instruments and reference materials for type approval and for other types of metrological control in case its metrological characteristics meet the established requirements.

Certified characteristic	Interval of permissible values by the certified characteristic of RM	The limits of permissible values of the relative error of the certified value of RM at $P=0,95, \%$	Permissible values of the relative expanded uncertainty of the certified value of RM at $k=2, \%$ not more than
BET surface area $S, m^2/g$	From 100 to 300	$\pm 2,0$	2,0
Specific volume of pore $V, cm^3/g$	From 0,2 to 1,0	$\pm 3,0$	3,0
Mean diameter of pore $4V/S$ nm	From 5 to 20	$\pm 3,0$	3,0
Specific adsorption of nitrogen A at $P/P_0=0,10$ , mole/kg	From 1,5 to 2,5	$\pm 3,0$	3,0
Specific adsorption of nitrogen A at $P/P_0=0,20$ mole/kg	From 2,0 to 3,0	$\pm 3,0$	3,0
Specific adsorption of nitrogen A at $P/P_0=0,30$ , mole/kg	From 2,5 to 4,0	$\pm 3,0$	3,0
Specific adsorption of nitrogen A at $P/pP_0=0,99$ , mole/kg	From 15 to 25	$\pm 3,0$	3,0