

## ALURATH B 75

raw material base: bauxite

chemical analysis [%]:

Al <sub>2</sub> O <sub>3</sub>	≥ 75
SiO <sub>2</sub>	≤ 16
Fe <sub>2</sub> O <sub>3</sub>	≤ 2

bulk density [g/cm<sup>3</sup>]: 2,7

apparent porosity [Vol.-%]: 18

compressive strength [MPa]: 100

refractoriness under load,  
DIN 51053 t<sub>0,5</sub> [°C], differential: 1520

suitable mortar/adhesive: B 75 / 1-B 75

dimensional tolerances :

≥ 200 mm	± 1,5 %
< 200 mm	± 2,0 mm

bow of bricks up to 1 % of the highest tolerances

The given quality values were determined at test bodies which were won of normal bricks. They represent average values which may not be transferred to other formats unconditionally.

draw up:	date:	released:	controlled:	revision:	product group: UIFOVK22/03	filename:
KL	10/94	10/94	03/03	03	Bricks	Alurath B 75

Additional information to explain the product (typical data):

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refractoriness under load with rising temperature $t_a$ [°C]:	1570
modulus of rupture at elevated temperature at 1400 °C [MPa]:	4,2
permanent linear change [%]: test temperature 1400 °C, test time 24 h	+ 0,4
thermal conductivity by the hot wire method [W/mK] at:200 °C	2,30
400 °C	2,20
600 °C	2,17
800 °C	2,17
1000 °C	2,20
1200 °C	2,22
1400 °C	2,24
thermal shock resistance DIN 51068, part 1, number of quenching [n]:	≥ 50
creep in compression at constant temperature compression...MPa; test temperature...°C	
$\epsilon_{25}$ [%]:	3,19
$S_{25-15}$ [%/h]:	0,061
linear thermal expansion coefficient between 20 °C and 1200 °C [ $10^{-7}K^{-1}$ ]:	75
mean specific heat [kJ/kg K] between 20 °C and 400 °C:	0,98
20 °C and 1200 °C:	1,12
characteristic feature: - especially high economic sort - excellent high-temperature properties and excellent thermal shock resistance for this brick-class	
preferred ranges of application: - economical ladle brick, transport ladles	

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