

<b>CERNIT CBS 23 - Inert-Balls</b>	<b>30-05-17</b>
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### 1. Operating Data

Nominal Size	Diameter (mm) CERNIT CBS 23	Crush strength (KN/particle)
1/8"	3 - 5	> 0.35
1/4"	6 - 8	> 0.60
3/8"	9 - 11	> 0.85
1/2"	11 - 14	> 1.85



5/8"	15 - 17	> 3.55
3/4"	19 - 21	> 4.87
1"	23 - 28	> 8.5
1 1/2"	35 - 42	> 12
2"	50 - 55	> 56

### 2. Chemical Composition

	<b>Techim Ceramic Balls CERNIT CBS 23</b>
SiO <sub>2</sub> + Al <sub>2</sub> O <sub>3</sub>	> 93 %
SiO <sub>2</sub>	68 – 73 %
Al <sub>2</sub> O <sub>3</sub>	21 – 26 %
MgO	< 0.5 %
Fe <sub>2</sub> O <sub>3</sub>	< 1 %
K <sub>2</sub> O + Na <sub>2</sub> O+CaO	< 4%
Fe <sub>2</sub> O <sub>3</sub> (leachable)	< 0,1 %

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### 3. Physical Figures



		<b>Techim Ceramic Balls CERNIT CBS 23</b>
Particle Density	g/cm <sup>3</sup>	2,3 - 2,4
Bulk density (for average particle density)	kg/m <sup>3</sup>	1320-1450
Free space	%	40
Water absorption	Weight-%	< 0.5
Spalling Resistance	°C	300
Acid Resistance	%	> 99.6
Modulus of elasticity [E=σ/ε]	N/mm <sup>2</sup>	4000 - 6000
Hardness (Mohs Scale)		> 6.5
Specific heat	KJ/kg,°C	0,84
Thermal conductivity	KJ/m,h,°C	6,3
Thermal expansion	1/°C	4,7 10 <sup>-6</sup>
Attrition loss	%	<< 1
max. application temp.	°C	1000

Sphericity [d <sub>max</sub> /d <sub>min</sub> ]	< 1,25
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#### Tolerances :

The customary permissible tolerances for ceramic products apply. A random sample is considered to comply with the tolerances if at least 90 % of the individual items in a batch satisfy the required conditions.

Subject to technical modification. All data represent provisional information only.  
No claim based on these data will be entertained.