Dragonite® Soda Lime Glass Beads

Type M - Article 5000 Available sizes 1.5mm to 9.0mm

Article	Diameter	Tolerance	Resistance to compression	Bulk density	Pieces per lb.
5002	1.5 mm	+/- 0.2 mm	750 - 800 N	93.60 lbs/cu.ft.	102,886
5003	2.0 mm	+/- 0.2 mm	950 - 1050 N	93.60 lbs/cu.ft.	43,404
5004*	2.5 mm	+/- 0.2 mm	1350 - 1450 N	93.60 lbs/cu.ft.	22,222
5005	3.0 mm	+/- 0.3 mm	1500 - 1700 N	93.60 lbs/cu.ft.	12,859
5006*	3.5 mm	+/- 0.3 mm	2050 - 2250 N	93.60 lbs/cu.ft.	8,095
5009	4.0 mm	+/- 0.3 mm	2300 - 2500 N	93.60 lbs/cu.ft.	5,422
5010	4.5 mm	+/- 0.3 mm	2600 - 2800 N	93.60 lbs/cu.ft.	3,809
5011	5.0 mm	+/- 0.3 mm	3000 - 3300 N	93.60 lbs/cu.ft.	2,777
5012	6.0 mm	+/- 0.3 mm	3800 - 4200 N	92.35 lbs/cu.ft.	1,604
5013	7.0 mm	+/- 0.3 mm		92.35 lbs/cu.ft.	1,009
5014	8.0 mm	+/- 0.4 mm		92.35 lbs/cu.ft.	677
5015	9.0 mm	+/- 0.4 mm		90.48 lbs/cu.ft.	472

Resistance to compression: internal test with Compressive strength inspector No. 10004.1, Company Hegewald & Peschke
*special sizes available by request

Technical / Physical Data

Melting point	1404	°C	
Softening point (Littleton point)	721	°C	($10^{7,65}$ dPas)
Transformation temperature	550	°C	(10^{13} dPas)
Specific thermal Conductivity	1.129	W/Km	
Coefficient of expansion	9.36	10^{6} (1/K)	(20-400 °C)
Specific thermal capacity	1.335	kJ/kg K	(> 600 °C)
Refractive index	1.5225		
Youngs-Module	65	GPa	
Hardness according to Mohs	6		
Specific weight	2.50	kg/dm3	Test with Pyknometer according DIN ISO 787-10
Abrasion after 9 h grinding	19.25	weight%	Abrasion test dd. 28.10.2005; Test conditions: Laboratory mill PML H/V, Speed 13,4 m/s, Filling grade 70 Vol.% Milling suspension: 4 kg Water, 1 kg Titandioxide Beads: Art. 5002, 1,50 mm
Air bubbles inside bead (> 0,3 mm)	≤ 1.0	%	Visual test: internal control of 200 Glass beads by Microscope

Jaygo, Inc. manufacturers and supplies various types of equipment for the Chemical, Food and Pharmaceutical Industries:

- Continuous high speed grinding mills
- Heavy Duty low speed dispersers
- High speed dispersers
- Filters/Dryers
- Sigma Blade Mixers/Extruders
- Conical ScrewBlenders
- High speed turbulent mixers
- Reactors
- Liquid filters
- Vacuum Deaerators
- General fabrication

Modern test room facilities at our plant to test your product on any of the above equipment.

Chemical resistance according to DIN-Methods

Hydrolytic class	DIN ISO 719	HGB 3
Acidic class	DIN 12116	S 2
Alcaline class	DIN 695	A 2

Chemical Composition

SiO_2	DIN 51001	MA.-%	66.70
Al_2O_3	DIN 51001	MA.-%	3.46
Fe_2O_3	DIN 51001	MA.-%	0.037
TiO_2	DIN 51001	MA.-%	0.018
K_2O	DIN 51001	MA.-%	0.16
Na_2O	DIN 51001	MA.-%	14.00
CaO	DIN 51001	MA.-%	7.59
MgO	DIN 51001	MA.-%	1.75
PbO	DIN 51001	MA.-%	0.32
BaO	DIN 51001	MA.-%	< 0.01
ZnO	DIN 51001	MA.-%	2.29
As_2O_3	DIN 51001	MA.-%	< 0.01
Sb_2O_3	DIN 51001	MA.-%	0.68
SO_3	DIN 51001	MA.-%	< 0.01
SrO	DIN 51001	MA.-%	< 0.01
ZrO_2	DIN 51001	MA.-%	0.01
B_2O_3	DIN 51086-1	MA.-%	2.90

Reference data from chemical Analysis - made by Dorfner Analysezentrum, D-92242 Hirschau; Test Report No. 1003383/AU-27897-07-06701, dtd June 5, 2007

All data on technical specification are reference values

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