Dragonite® Soda Lime Glass Beads

Type S – Article 4500 Available Sizes

Article	Size range Ø	Resistance to compression	Bulk density	Pieces per lb.
4501	0.25 – 0.50 mm	---------	94.22 lbs/cu.ft.	6,584,818
45015	0.40 – 0.60 mm	---------	93.60 lbs/cu.ft.	2,777,954
4502	0.50 – 0.75 mm	---------	92.97 lbs/cu.ft.	1,422,318
4503	0.75 – 1.00 mm	---------	92.35 lbs/cu.ft.	518,318
4504	1.00 – 1.30 mm	250 - 350 N	91.72 lbs/cu.ft.	228,318
4505	1.25 – 1.65 mm	350 - 500 N	91.72 lbs/cu.ft.	113,900
4506	1.55 – 1.85 mm	500 - 650 N	91.72 lbs/cu.ft.	70,677
4507	1.70 – 2.10 mm	600 - 750 N	91.72 lbs/cu.ft.	50,622
4508	2.00 – 2.40 mm	750 - 900 N	91.72 lbs/cu.ft.	32,609
4510	2.40 – 2.90 mm	950 - 1100 N	91.72 lbs/cu.ft.	18,659
4511	2.85 – 3.45 mm	1100 - 1450 N	91.10 lbs/cu.ft.	11,109
4512	3.40 – 4.00 mm	1450 - 1650 N	91.10 lbs/cu.ft.	6,854
4513	3.80 – 4.40 mm	1700 - 2100 N	90.48 lbs/cu.ft.	5,036

Resistance to compression: internal test with Compressive strength inspector No. 10004.1, Company Hegewald & Peschke

Technical / Physical Data

Melting point	1446	°C	
Softening point (Littleton point)	734	°C	($10^{7,65}$ dPas)
Transformation temperature	549	°C	(10^{13} dPas)
Specific thermal Conductivity	1.129	W/Km	
Coefficient of expansion	9.05	10^{6} (1/K)	(20-400 °C)
Specific thermal capacity	1.329	kJ/kg K	(> 600 °C)
Refractive index	1.5188		
Youngs-Module	63	Gpa	
Hardness according to Mohs	≥ 6		
Roundness (ratio of axis)	≥ 95	%	
Abrasion after 9 h grinding	23.85	weight %	Abrasion test dd. 08.11.2005; 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. 4505, 1,25 – 1,55 mm Ø
Air bubbles inside bead (> 0,3 mm)	≥ 2.5	%	Visual test: internal control of 200 Glass beads by Microscope
Specific weight	2.50	kg/dm³	Test with Pyknometer according DIN ISO 787-10

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 / Heavy Metal Content

SiO_2	DIN 51001	MA.-%	72.50	
Al_2O_3	DIN 51001	MA.-%	0.58	
Fe_2O_3	DIN 51001	MA.-%	0.11	
TiO_2	DIN 51001	MA.-%	0.04	
K_2O	DIN 51001	MA.-%	0.21	
Na_2O	DIN 51001	MA.-%	13.00	
CaO	DIN 51001	MA.-%	9.06	
MgO	DIN 51001	MA.-%	4.22	
PbO	DIN 51001	MA.-%	< 0.01	
BaO	DIN 51001	MA.-%	< 0.01	
ZnO	DIN 51001	MA.-%	< 0.01	
As_2O_3	DIN 51001	MA.-%	< 0.01	
Sb_2O_3	DIN 51001	MA.-%	0.02	
SO_3	DIN 51001	MA.-%	0.12	
SrO	DIN 51001	MA.-%	< 0.01	
ZrO_2	DIN 51001	MA.-%	0.01	
B_2O_3	DIN 51086-1	MA.-%	< 0.01	
Lead (Pb)	DIN EN ISO 11885-E22	mg/kg	5.49	ICP-OES F
Cadmium (Cd)	DIN EN ISO 11885-E22	mg/kg	< 0.10	ICP-OES F
Mercury (Hg)	AZ-Regulation	mg/kg	< 0.10	ICP-OES F
Arsenic (As)	AZ-Regulation	mg/kg	3.29	ICP-OES F
Antimony (Sb)	AZ-Regulation	mg/kg	94.80	ICP-OES F
Chrom (Cr)	DIN EN ISO 11885-E22	mg/kg	2.16	ICP-OES F
Chrom VI (Cr IV)	DIN 38405-D24	mg/kg	0.88	F
Zinc(Zn)	DIN EN ISO 11885-E22	mg/kg	18.20	ICP-OES F

Reference data from chemical Analysis - made by Dorfner Analysezentrum, D-92242 Hirschau; Test Report No. 1003383/AU-27897-07-06697, dtd June 5, 2007

All data on technical specification are reference values

JAYGO INCORPORATED

7 Emery Avenue
Randolph, NJ 07869

tel 908.688.3600
fax 908.688.6060

sales@jaygoinc.com
www.jaygoinc.com