

Product Data Sheet



The German
spirit of quality
since 1854



SiLibeads AIR Hollow Glass Beads

First created on: 2017-05-08 Updated on: 2019-05-22
Next inspection on: 2019-12-31 Printed on: 2019-05-22

Version: V10/2019

Product: SiLibeads AIR Hollow Glass Beads

Material: Hollow glass microspheres made of borosilicate glass

Application:

- Filling material for the modification of the physical properties of thermoplastics and duroplastics.
- Filling material for the reduction of weight in composite materials as lightweight concretes or cements.
- As a thermal insulator in thermal insulating coatings (also for the modification of the physical properties of the coatings).
- Effect material for decorative effects in wall paints.

Technical Data:

Color and shape: colorless rigid spheres, white powder
Rate of floatage: 90 - 95 %
Softening point: 625°C
pH-value: 8.0 - 9.5

Standard Sizes:

Article	(True) density	Bulk density	Crush Strength	Particle Sizes			Thermal Conductivity (at 20 °C)
				D10	D50	D90	
8015	0.15 g/cm ³	0.10 g/cm ³	2 MPa	30 µm	70 µm	110 µm	0.0498 W m ⁻¹ K ⁻¹
8020	0.20 g/cm ³	0.12 g/cm ³	4 MPa	32 µm	68 µm	106 µm	0.0503 W m ⁻¹ K ⁻¹
8025	0.25 g/cm ³	0.15 g/cm ³	5 MPa	30 µm	65 µm	100 µm	0.0512 W m ⁻¹ K ⁻¹
8032	0.32 g/cm ³	0.19 g/cm ³	14 MPa	30 µm	56 µm	74 µm	0.0535 W m ⁻¹ K ⁻¹
8038	0.38 g/cm ³	0.21 g/cm ³	36 MPa	20 µm	50 µm	80 µm	0.0654 W m ⁻¹ K ⁻¹
8040	0.40 g/cm ³	0.23 g/cm ³	28 MPa	20 µm	45 µm	70 µm	0.0654 W m ⁻¹ K ⁻¹
8046	0.46 g/cm ³	0.26 g/cm ³	41 MPa	22 µm	45 µm	65 µm	0.0777 W m ⁻¹ K ⁻¹
8060	0.60 g/cm ³	0.35 g/cm ³	55 MPa	18 µm	40 µm	60 µm	0.0934 W m ⁻¹ K ⁻¹
8070	0.70 g/cm ³	0.42 g/cm ³	124 MPa	15 µm	30 µm	40 µm	0.1017 W m ⁻¹ K ⁻¹
8082	0.60 g/cm ³	0.35 g/cm ³	82 MPa	18 µm	40 µm	60 µm	0.0990 W m ⁻¹ K ⁻¹

Assessment according to Food Legislation:

The Glass beads comply with the requirements § 31 of the German Food and Feed Code (LFGB) and of the European Food Regulation (EC) No. 1935/2004.

Conformity to Cosmetic Regulation:

The Glass beads are in accordance with permitted limits of regulation (EC) No. 1223/2009.

Product Data Sheet



The German
spirit of quality
since 1854



SiLibeads AIR Hollow Glass Beads

First created on: 2017-05-08 Updated on: 2019-05-22
Next inspection on: 2019-12-31 Printed on: 2019-05-22

Version: V10/2019

Chemical Analysis:

Name	Method	Weight (Reference values)	CAS-No.	EINECS
Silicon dioxide SiO ₂	DIN 51001	72.50 %	7631-86-9	231-545-4
Boric oxide B ₂ O ₃	DIN 51086-1	11.50 %	1303-86-2	215-125-8
Calcium oxide CaO	DIN 51001	10.00 %	1305-78-8	215-138-9
Sodium oxide Na ₂ O	DIN 51001	5.00 %	1313-59-3	215-208-9
further		1.00 %		

The heavy metal content of the Glass beads keeps the permitted limits of EU directive 2011/65/EC (RoHS).

Lead < 1000 ppm Cadmium < 100 ppm Chrome VI < 1000 ppm Mercury < 1000 ppm

Additional Information:

Storage indication: Store in a dry manner in closed (original) container by room temperature.
Disposal: Please consult national laws and local regulations in force for disposal or landfill.
Safety advice: High risk of slipping due to spillage of product.
Product information: Safety Data Sheet SiLibeads Hollow Glass Beads

Manufacturer/Supplier: Sigmund Lindner GmbH
Oberwarmensteinacher Str. 38
95485 Warmensteinach / GERMANY
Phone: +49-9277-9940
Fax: +49-9277-99499
Web: www.sili.eu
E-Mail: sili@sigmund-lindner.com

All data are reference values – subject to change without prior notice