



BadgerCast™

Superior by Nature, Quality by Badger®

BadgerCast™ foundry sand is a premium round grain silica sand made specifically for the metals casting industry. Mother Nature has provided us with the highest purity sandstone in North America. Our customized mining, washing, drying and blending processes transform this raw material into the best finished product available in the market. Our management and manufacturing processes are ISO certified, guaranteeing consistent quality with every load.

Percent Retained

	FW45	FW50	FW55	FW60	FW65	FW68	FW70	FW75	FW80	FW90	FW100	FW110	T40	T50	T56
20 mesh															
30 mesh	1.0	0.5	0.2	0.1									6.5		
40 mesh	20.6	14.7	9.5	6.0	2.2	0.8	0.6	0.2	0.1	0.1			31.1	6.2	4.2
50 mesh	34.4	29.8	24.1	17.6	10.1	6.3	5.1	3.6	2.4	1.2	0.5	0.2	42.6	35.3	27.7
70 mesh	28.0	29.6	30.4	29.9	29.7	28.8	28.6	25.2	19.1	12.3	5.9	1.5	18.7	36.7	34.2
100 mesh	14.0	21.3	28.8	35.8	43.5	47.1	45.5	45.5	44.1	37.7	30.7	20.3	1.1	17.0	26.0
140 mesh	1.9	3.8	6.3	9.3	12.5	14.7	16.8	20.7	26.3	34.4	40.7	47.0		4.4	7.4
200 mesh	0.2	0.3	0.6	1.1	1.8	2.1	3.0	4.3	7.1	12.6	19.2	26.4		0.3	0.4
270 mesh				0.1	0.2	0.3	0.4	0.5	0.9	1.6	2.8	4.4			
Pan									0.1	0.1	0.2	0.3			
AFS/GFN	46.0	50.4	55.1	60.0	65.4	68.3	70.2	73.7	79.5	88.6	98.4	108.7	37.8	51.0	55.7

Rev. 2.3.17

Silicon Dioxide (SiO ₂)	99.70%
Aluminum Oxide (Al ₂ O ₃)	0.13%
Iron Oxide (Fe ₂ O ₃)	0.11%
Potassium Oxide (K ₂ O)	0.08%
Calcium Oxide (CaO)	0.02%
Sodium Oxide (Na ₂ O)	0.01%
Magnesium Oxide (MgO)	<0.01%
Titanium Dioxide (TiO ₂)	<0.01%

Chemical Properties

Loss on Ignition	0.0830%
Moisture	0.10%
Base pH	7.0
Sintering Point	3010° F
Grain Shape	Rounded
Specific Gravity	2.65
Bulk Density (tapped)	105 - 111 lb./ft. ³
Bulk Density (untapped)	94 - 98 lb./ft. ³
Clay Content	0.08%
Acid Demand Value	0.5

Physical Properties

Base Permeability (lb./ft³)

FW45	FW50	FW55	FW58	FW60	FW63	FW65	FW68	FW70	FW75	FW80	FW90	FW100	FW110	T50	T53	T56
102	78	64	56	55	50	49	48	45	41	34	28	24	21	82	72	65

All chemical and physical properties are typical and tested in accordance with AFS Mold and Core Test Handbook in BMC's laboratories. We give no warranty for our products, either expressed or implied. We recommend that you confirm all properties in the laboratory of your choice.



Silica Sand and Resin-Coated Silica Sand Products DANGER

These products have been classified, following the Globally Harmonized System (GHS) of Classifying and Labeling Chemicals criteria, as a Category 1A Carcinogen, a Category 1 Specific Target Organ Toxicity (following repeated exposures), and a Category 2B Eye Irritant. For Industrial Use Only. DO NOT USE THIS PRODUCT FOR BLASTING OR AS AN ABRASIVE. DO NOT PNEUMATICALLY UNLOAD THE RESIN-COATED SILICA SAND PRODUCTS AT A PRESSURE EXCEEDING 5 PSI SO AS TO AVOID ABRADING THE PRODUCT. DO NOT BREATHE DUST. Read the specific Safety Data Sheet (SDS) before using and follow applicable local, state and federal health and safety standards. The SDSs for the products are available online at www.badgerminingcorp.com or by calling 715-662-2400. October 22, 2016 Revision E