



SIRIM Berhad
 (Company No. 367474 - V)
 No. 1 Persiaran Dato' Menteri,
 Section 2, P. O. Box 7035,
 40700 Shah Alam Selangor
 Tel: (603) 55446868 | Fax: (603) 55446867
 www.sirim.my

TEST REPORT

REPORT NO: QG17002725	PAGE: 1/3
------------------------------	------------------

This Test Report refers only to samples submitted by the applicant to SIRIM Berhad. This Test Report shall not be reproduced, except in full and shall not be used for advertising purposes by any means or forms without written approval from Executive Director/CEO of SIRIM Berhad.

Applicant	: Mr Kumaran
Manufacturer/ Company	: ROCK GARNET TRADING SDN. BHD. No. 8-1, Jalan Palma Raya, Bandar Botanic, 41200 Klang SELANGOR
Test Item	: Iron Furnace Slag
Reference standard/ Method of Test	: ISO 11126-6: Specifications for non-metallic blast-cleaning abrasives- Iron Furnace Slag
Description of Test item	: Solid
Date Received of Test item	: 6 December 2017
Testing Location	: Porous Ceramic Room
Date of Test Performed	: 7 – 12 December 2017
Job No.	: QG17002725
Description of Lab Condition	: Not applicable
Manufacturer/ Company	: ROCK GARNET TRADING SDN. BHD. No. 8-1, Jalan Palma Raya, Bandar Botanic, 41200 Klang SELANGOR
Issued Date	: 12 December 2017
Test Item	: Iron Furnace Slag
Reference standard/ Method of Test	: ISO 11126-6: Specifications for non-metallic blast-cleaning abrasives- Iron Furnace Slag

<p>Prepared by:</p>  <p>(Zarina Abdul Wahid) Senior Researcher Industrial Centre of Innovation NANOTECHNOLOGY SIRIM Industrial Research</p>		<p>Approved by:</p>  <p>(Dr. Teng Wan Dung) Principal Researcher Industrial Centre of Innovation NANOTECHNOLOGY SIRIM Industrial Research</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

This Test Report refers only to samples submitted by the applicant to SIRIM Berhad. This Test Report shall not be reproduced, except in full and shall not be used for advertising purposes by any means or forms without written approval from Executive Director/CEO of SIRIM Berhad.

TEST RESULTS

1. Determination of particle size distribution (ISO 11127-2)

Table 1. Specification for Particle Size Distribution of Non-Metallic Blast Cleaning Abrasive

Particle Size Range, mm		0.2 to 0.5	0.2 to 1.0	0.2 to 1.4	0.2 to 2.0	0.2 to 2.8	0.5 to 1.0	0.5 to 1.4	0.5 to 2.0	0.5 to 2.8
Oversize	Sieve size	0.5	1	1.4	2	2.8	1	1.4	2	2.8
	Residue, % (m/m) maximum	10	10	10	10	10	10	10	10	10
Nominal Size	Sieve size	0.2	0.2	0.2	0.2	0.2	0.5	0.5	1	1.4
	Residue, % (m/m) minimum	85	85	85	85	85	80	80	80	80
Undersize	Sieve size	0.2	0.2	0.2	0.2	0.2	0.5	0.5	1	1.4
	Through-flow, % (m/m) maximum	5	5	5	5	5	10	10	10	10

Table 2. Result of Particle Size Distribution

Particle Size Range : 0.2 to 1.0 mm		Requirements	Results	Remarks
Oversize	Sieve Size	1.0	0.0	Complied
	Residue, % (m/m) maximum	10		
Nominal Size	Sieve Size	0.2	99.9	Complied
	Residue, % (m/m) minimum	85		
Undersize	Sieve Size	0.2	0.1	Complied
	Residue, % (m/m) maximum	5		

Table 2. Result of Particle Size Distribution

Particle Size Range : 0.2 to 1.0 mm		Requirements	Results	Remarks
Oversize	Sieve Size	1.0	0.0	Complied
	Residue, % (m/m) maximum	10		
Nominal Size	Sieve Size	0.2	99.9	Complied
	Residue, % (m/m) minimum	85		
Undersize	Sieve Size	0.2	0.1	Complied
	Residue, % (m/m) maximum	5		





REPORT NO: QG17002725

PAGE: 3/3

This Test Report refers only to samples submitted by the applicant to SIRIM Berhad. This Test Report shall not be reproduced, except in full and shall not be used for advertising purposes by any means or forms without written approval from Executive Director/CEO of SIRIM Berhad.

Table 3. Particle Size Distribution of Iron Furnace Slag

Sieve Micron (µm)	Weight Retained, %	Cumulative Retained, %	Weight Passing, %
1000	0.0	0.0	100.0
850	2.8	2.8	97.2
710	30.3	33.1	66.9
600	26.3	59.4	40.6
500	11.9	71.3	28.7
425	18.8	90.1	9.90
300	6.1	96.2	3.8
250	3.7	99.9	0.1
Pan	0.1	100.0	0.0

Table 3. Particle Size Distribution of Iron Furnace Slag

Table 4. Test results of Iron Furnace Slag

Description	Test Method	Requirements	Results	Remarks
2. Determination of apparent density, (kg/m ³)	ISO 11127-3	(3.0 – 3.3) x 10 ³	3.54 X 10 ³	Complied
3. Assessment of hardness by a glass slide test	ISO 11127-4	Min. 6	6	Complied
4. Moisture measurement	ISO 11127-5	Max. 0.20	0.01	Complied
5. Determination of water-soluble contaminants by conductivity measurement at 20°C, (mS/m)	ISO 11127-6	Max. 25	18.76	Complied
6. Determination of water soluble chloride, % (m/m)	ISO 11127-7	Max. 0.0025	Nil	Complied

