

GILES CHEMICAL ~ PREMIER MAGNESIA

Company Procedure

Title: ARCH Sampling and Testing Number: L12-PR-100-038

Owner: Ashley Williams Revision: 3

Effective Date: 04/04/13 Page: 1 of 2



1.0 Purpose

This procedure describes the method for sampling and testing for Arch loads

2.0 Scope

This procedure applies to all finished Arch loads. All testing is to be performed in the QA Lab.

3.0 Responsibility

Lab Associate is responsible for testing Arch loads.

4.0 Safety Considerations

Wear the appropriate lab PPE and follow area safety rules.

Safety is a condition of employment. Employees are not authorized to work in an unsafe manner and are prohibited from harming the environment of the facility or community.

5.0 Materials/Equipment

- Sample bags
- Sieve machine Retsch AS-200
- Sieves 16,50,70, and pan
- Balance
- Weigh boat
- Small spatula
- Brush
- Gloves

6.0 Procedure

SAMPLING

- 1. Operator will obtain sample from top of super sacks 1, 5, 10, 15, and 20. The empty sample bags will be provided by lab and placed on operators table. The bags will have a place for the operator to record lot#, date, time and the letter designated to the specific Arch load in process. Bags are to be filled completely and sealed, then placed in the Arch box for lab pick-up.
- 2. Quality Associate will pick up samples and transport them to lab for testing.



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LAB TESTING

- 1. Record the Arch letter and the pick-up number on the ARCH Spreadsheet (L12-PR-100-F038)
- 2. The lab is to weigh 50 grams of sample from each bag on calibrated lab scale and individually add to Sieve Machine that contains sieves.
- 3. The size of sieves to be used are 16, 50 and 70 mesh as well as left over pan. In this case left over pan will reflect all sample < 70 mesh.
- 4. Ensure that the timer is set for 2 minutes on the sieve machine.
- 5. Run the Sieve Machine for 2 minutes. This applies for each sample tested.
- 6. Weigh each screen of material on balance and record weight.
- 7. Record the weights of each screen on the spreadsheet in the corresponding column.
- 8. Column mesh size <70 cannot be >2.00%. If a sample fails this requirement, Quality Associate will take samples from the pallet before and pallet after the failed sample. If these pallets fail, the next pallets will be checked until a passing sample is obtained. If super sack fails this requirement a new sack will be produced and sample will be taken and tested. If the material meets specification after additional testing the load will be released. If whole load of ARCH fails then a new load will be produced. If material meets specification it will be released. If load fails on any sample the Director of Quality, Plant Manager and Lead Operator should be notified immediately.
- 9. Results must be emailed to ARCH before load is released. Quality Department is responsible for sending results.
- 10. Attach a copy of the analysis to the Bill of Lading and sign off approval on the front page of the BOL.

7.0 Reference Documents

Arch Spreadsheet (L12-PR-100-F038)

8.0 Amendment Record

Updated using SOP Template Instructions (Q12-PR-100-004) and Document Numbering (Q12-PR-100-003)