

# PACKAGES CONVERTORS LIMITED

BU-FC

Document type  
WORK INSTRUCTION

Title  
METHOD FOR DETERMINATION OF RETENTION OF  
FILLERS AND DRY POWDERS.

Prepared by Asad Javed Manager R&D&QA	Approved by Salman Fazul -u- Rehman BUMFC	PAGE 1 (2)	REV 1	DATE 01.07.2024	DOC NO. WIQA/BU-FC/8.2.4 /13
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## 1.0 PURPOSE:

To check the retention of the fillers on standard sieve.

## 2.0 SCOPE

This method describes the determination of the retention of the fillers, Anti-set off powder on standard mesh size sieve to be used in BU-FC.

## 3.0 REFERENCES:

Sr. No.	Reference Document	Doc. No.
3.1	Standard Test Method	Method CC 205 of ECC Technical Brochure Supplier's test method

## 4.0 APPARATUS:

4.1	Weighing Balance	precision upto 0.0001 gm, 0.01gm
4.2	Electrical Stirrer	---
4.3	Glass Beaker	1000 ml
4.4	Standard Sieve	160-170, 325 and 400 mesh
4.5	Oven	---
4.6	Brush	---
4.7	Weighing Dish	---
4.8	Pipette	5 ml.

## 5.0 REAGENTS:

5.1	Dispersing Agent	Polysalt-S or Dispex N 40 or any other.
5.2	Tap Water Stream	---

## 6.0 PROCEDURE:



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SR. NO.	ACTIVITIES
6.1	METHOD FOR FILLERS & PIGMENTS:
6.1.1	Take 800 ml water in 1000ml beaker and add 5 ml of dispersant solution.
6.1.2	Add known weight of sample and soak for 10 minutes.
6.1.3	Continue stirring until fully dispersed. This point is generally reached after mixing for 15 minutes.
6.1.4	Slowly pass the slurry through a standard sieve (of mesh as mentioned in the standard specifications) holding it in an inclined position.

SR. NO.	ACTIVITIES
6.1.5	Start washing at the upper edge of the sieve and gradually move towards the lower edge.
6.1.6	Continue washing until the washings are clear.
6.1.7	Dry the residue alongwith the screen in the oven.
6.1.8	Remove the sieve and gently tap on the bench top.
6.1.9	Carefully brush all the powder remaining on the sieve into the tared dish and weigh.
6.1.10	Calculation:  Weight of sample taken = A g Weight of residue on the sieve = B g Retention % = $B / A \times 100$
6.1.11	Mention the sieve number while reporting.
6.2	METHOD FOR ANTI SET OFF POWDER:
6.2.1	Put one kg of sample in a standard sieve (of mesh as mentioned in standard specifications).
6.2.2	Vibrate the sieve by hands and let the sample go through.
6.2.3	Shift the residue into the tares weighing dish and weigh.
6.2.4	Calculation:  Weight of sample taken = A g Weight of residue on the sieve = B g Retention % = $B / A \times 100$
6.2.5	Mention the sieve number while reporting.

## 7.0 RESPONSIBILITY:

- Lab Assistant
- QA Supervisor

