## Purpose

To ensure all products manufactured in LMD production comply with standard product specifications

## Scope

This procedure is applicable to all the products manufactured in LMD.

## Responsible

## All staff members performing and supervising Quality Control

## Procedure

**QC of finished goods:**

1. Sample of each batch is provided from production department in order to evaluate if product is as per quality standards.
2. Tests are performed on product based on product line as per tests mentioned below.
3. If product meets all specifications then it is approved for delivery to customer.
4. All specifications are recorded on QC sheet
5. If product do not meet specification and slight adjustment is required, it is adjusted after lab trial and tested again.

**Dry pigment**

**Product lines:** DPM

Following tests are performed as per work instruction after receiving sample from production:

**Sheet Preparation:**

By using the dry powder grade and dosage provided by developer, sheet on two roll mill is made in direct shade and in reduction in following composition:

* Direct shade at 2% dosage:

PVC-30g

DOP-30g

DPM-0.6g

* Composition in reduction:

PVC-30g

DOP-30g

DPM-0.6g

TiO2-(4-5)g

Using spectrophotometer values are checked.

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Tolerance** | **Equipment** |
| Shade evaluation (sheet) | dE<1.0 | Spectrophotometer |

Retention period for QC samples of DPM series is 1 year.

Replacement period of standard is 01 year.

**Polytint:**

**Product lines:** Polytint series

Following tests are performed as per work instruction after receiving sample from production:

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Tolerance** | **Equipment** |
| Shade evaluation (drawdown) | dE<1.0 | Spectrophotometer |
| Viscosity | ±5% at same temperature | Viscometer |
| Fineness of grind | <2.5 micron | Grinding gauge |

Retention period for QC samples is 6 Months for PT series.

Replacement period of standard is 05 month.

**Water based products:**

**Product lines:** MaxFlow AM, Microfix series

Following tests are performed as per work instruction after receiving sample from production:

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Tolerance** | **Equipment** |
| Shade evaluation (panel) | dE<1.0 | Spectrophotometer |
| pH measurement | 7-9 | pH meter |
| Viscosity | As per TDS | Viscometer |
| Fineness of grind | <2.5 micron | Grinding gauge |

**Tint Preparation**

**AM-series:**

1. Tint is prepared on 1% colorant in white paint base=49.5 gm and sample=0.5 gm.
2. Draw the shade (standard and sample) on panel card.

**Microfix series:**

1. Tint is prepared on
2. 3% (48.5 gm of stock paste and 1.5 gm of sample) colorant in Stock Paste
3. 0.3% (49.85 gm of stock paste and 0.15 gm of sample) colorant in Stock Paste
4. Draw the shade (standard and sample) on cotton fabric and dry.

Retention period for QC samples: 1 Year.

Replacement period of standard: 03 months.

**Solvent based products:**

**Product lines:** MaxFlow OM, MaxFlow SM

Following tests are performed as per work instruction after receiving sample from production:

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Tolerance** | **Equipment** |
| Shade evaluation (panel) | dE<1.0 | Spectrophotometer |
| Viscosity | As per TDS | Viscometer |
| Fineness of grind | <2.5 micron | Grinding gauge |

**Tint Preparation**

**OM series:**

1. Tint is prepared on 1% by mixing of white base=49.5 gm and sample=0.5 gm.
2. Draw the shade on panel card.

**SM series:**

1. Draw the direct shade (standard vs Sample) on panel card.
2. Tint/ Reduction is prepared 20 % colorant in (70% Varnish and 10% solvent)
3. Draw the tint shade (standard vs Sample) on panel card

Retention period for QC samples is 1 Year.

Replacement period of standard is 05 month.

**Amendment History**

|  |  |  |
| --- | --- | --- |
| **Revision Number** | **Section** | **Amended Text** |
|  |  |  |