**Resin upgrade comparison**

　　Different acrylic resins：(B752-01/B752-03) Boiling water resistance test

**Use of raw materials**

　　B752-01 ： N.V.=59~62% OH%=1.68%

B752-03 ： N.V.=58.5~61.5% OH%=2.76%

**Samples Examined**

* 1. B752-01 ：Acrylic polyol resin
  2. B752-03 ：Acrylic polyol resin
  3. B933-01 ：Melamine resin (Cytec)
  4. C100-03 ：Catalyst
  5. C553 ：Levelling agent
  6. C314 ：Levelling agent
  7. C150-04 ：Adhesion promoter
  8. B776 ：HDI trimer polyisocyanate NCO 22% (Bayer)
  9. B933-02 ：Melamine resin

**Method**

1. Under the same process conditions, B752-01 and B752-03 are used as the main resin to produce the paint.
2. Mix the produced paint with B933-01 (hardener) and dilute it with S637-01 Solvents.
3. Boiling water test condition => Film thickness: 20±5μm / Baking temperature: 170℃ / Baking time: 7 minutes
4. Boiling water test conditions => Temperature: 90±5℃ / Time: 24Hours & 30Hours

**Report**

Test the adhesion and chemical resistance of paints produced by 2 different esters after 24H and 30H in boiling water at 90±5℃ respectively under the same process conditions.

Comparison of adhesion and chemical resistance。

Test 1 → original

Test 2 → 90±5℃ for 24Hours

Test 3 → 90±5℃ for 30Hours

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test NO. | 1 | 2 | 3 | Film | Function | Supplier |
| Raw Materials | Weight(%) | | |
| B752-01 | 65.11 | 59.72 | 55.67 | 22μm | Acrylic Resin | ------ |
| B752-03 | 64.61 | 60.23 | 57.55 | 20μm | Acrylic Resin | ------ |

**NaCl resistance test Boiling water resistance test**

|  |  |  |
| --- | --- | --- |
|  | B752-01 | B752-03 |
| Salt spray test  (35**℃** 5% in pure water ) | OK | OK |
| Salt spray test  (5% in tap water) | OK | OK |
| NaCl  (5% in rain water) | OK | OK |

|  |  |  |
| --- | --- | --- |
|  | B752-01 | B752-03 |
| Boiling water resistance | OK | OK  (Better) |