Paint Sprayer Test Programme

Report Number:	**071-75914294-000**
Issue Date:	**2011-07-07**
Client:	**John Mills Limited (JML)**
	JML House **Regis Road** **London** **NW5 3EG**
Testing Laboratory:	**TÜV SÜD Product Service Ltd**
	Octagon House **Concorde Way** **Segensworth North** **Fareham** **Hampshire** **PO15 5RL**
Sample under Assessment	

Prepared by:	**Reviewed by:**
Luke Kington **Consumer Product Specialist**	**Mark Penton** **Retail Laboratory Manager**

The results refer to the actual product(s) provided for assessment

1. INTRODUCTION

1.1. Objective

TÜV SÜD Product Service was commissioned by JML to provide performance testing on a new design of paint sprayer.

1.2. Purpose of Assessment

The purpose of the assessment was to assess how the new paint sprayer performs when used for spraying a number of different paint types. The following paint types were used:

- Ronseal Varnish
- Dulux Acrylic Paint
- Ronseal Wood Primer & Undercoat
- Hammerite Radiator Paint
- Bug Clear Pesticide
- B&Q Timbercare
- Ronseal Decking Cleaner & Restorer
- B&Q Quick Dry All Purpose Primer & Undercoat
- Dulux Vinyl Matt
- B&Q Masonry Paint
- Coloron Danish Oil

1.3. Conclusion

With the exception of masonry paint it was found that the sprayer was able to spray all types of paints/substances. It was considered the overall finish achieved varied depending on the viscosity of the substance being sprayed but this is to be expected.

Although the majority of the products were easily cleaned from the sprayer it was noted that as the motor forms a part of the whole product it could not be fully submerged in water unlike other samples seen.

2. METHOD

An area of plasterboard measuring 120 x 140cm was sprayed with each different paint type listed above. The sprayer was then given a rating for each spray paint from 1 to 5 against the following criteria:

- Coverage – how well the area sprayed was covered.
- Spray – how well did the paint spray.
- Ease of adjustment – could the spray pattern be easily adjusted.
- Ease of cleaning – could the paint be easily cleaned from the sprayer

The paints were also checked to ensure there were no runs or drips visible after spraying. The quantity of each paint substance used to spray the area was also measured.

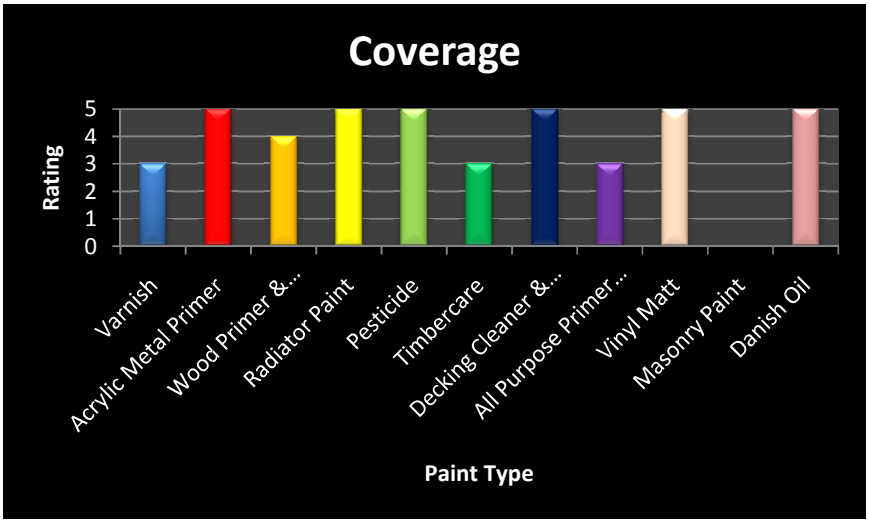
The viscosity of each paint was adjusted to that required by the user manual.

3. RESULTS

The masonry paint was found to be of too thick a consistency too be sprayed. The viscosity was reduced to 20 but it was found the paint still blocked up the sprayers. Two different prayers were tried with the same result in each. All of the following results therefore show a 0 for the masonry paint ratings.

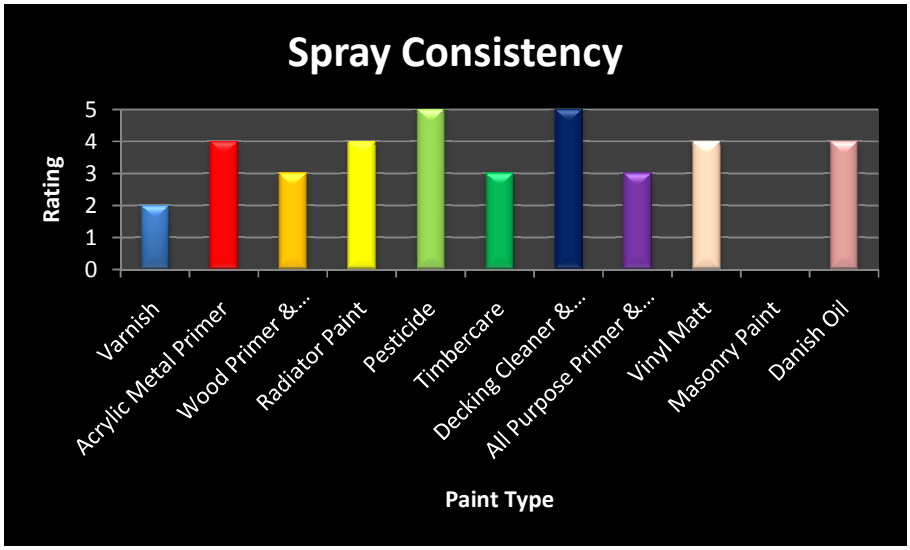
3.1. Coverage

The below graph shows that the majority of the paints gave a good coverage of the plasterboard. It was found that varnish, timbercare and the all purpose primer did not provide as good a coverage due to their consistency.



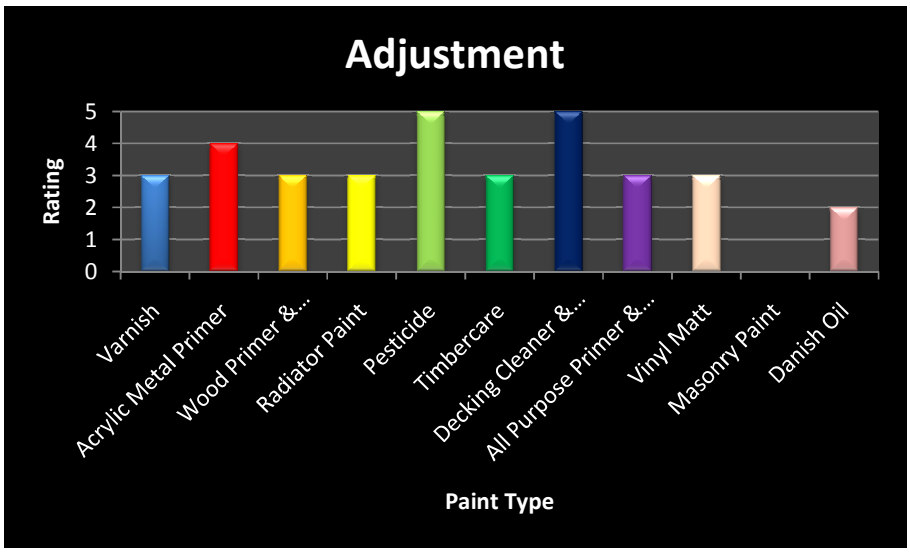
3.2. Spray

The below graph shows the results for the spray were quite varied across the paints. It shows what is to be expected which is that the thinner the substance the better the spray, this is why the pesticide and decking cleaner scored a 5 whilst the thicker varnish only scored a 2. Overall apart from the masonry paint and the varnish the spray from all types was average or above.



3.3. Spray Adjustment

The below ratings show the affect the adjustment of spray had on the spray pattern. It was considered that the way of adjusting the spray was easy and convenient and was obviously the same for all paint types. The below shows that on the majority of the paints the adjustment had an average affect.

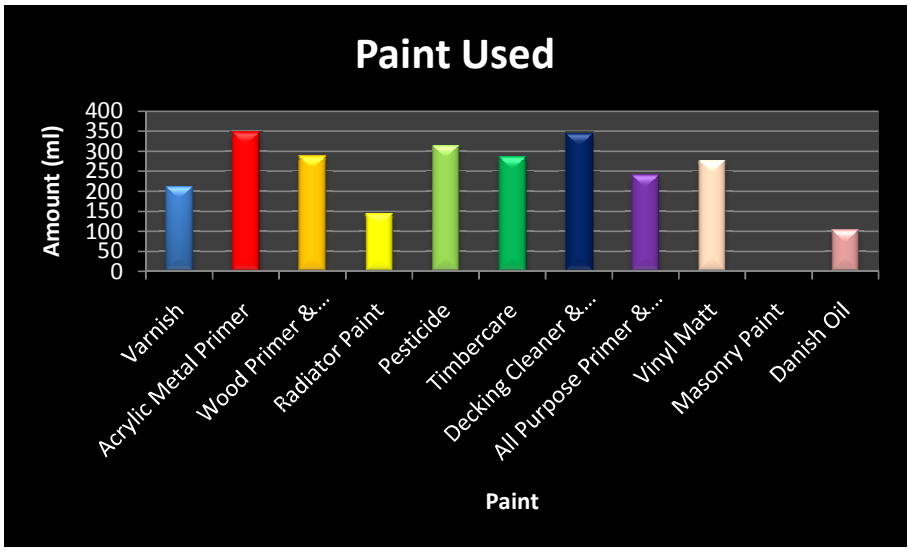


3.4. Ease of Cleaning

The below shows that the majority of the paints were found to be relatively easy to clean from the gun. The worst ones were the All Purpose Primer & Undercoat & the Vinyl Matt. These were found to get clogged up so were not so easy to clean out of the gun.

3.5. Paint Used

The below shows the amount of each paint used. It shows that the thinner paints tended to use more to cover the same area than the thicker paints even when mixed in accordance with the instructions.



3.6. TÜV SÜD Product Service Comments

It was found that no dripping occurred with any of the paints and only the Timbercare and Acrylic Metal Primer ran. It is considered that the way the end user uses the product will affect the finish achieved.