INNOVATIVE COATING SYSTEMS

# **Technical Bulletin**

# **APPLICATION OF LOW GLOSS DURAPOL Moisture Cure**

The application of subdued gloss, moisture curing polyurethanes is more demanding on the applicator than traditional gloss finishes.

DURAPOL 1012 Semi-Gloss, DURAPOL 1013 Super Satin and DURAPOL 1014 Low Sheen develop their low sheen as the matting agents come to the surface of the wet coating during the drying process. Look into the top of a DURAPOL 1012 Semi Gloss, DURAPOL 1013 Super Satin and DURAPOL 1014 Low Sheen drum and you will notice the matting agent on-top of the liquid.

Polycure DURAPOL 1012 Semi Gloss, DURAPOL 1013 Super Satin and DURAPOL 1014 Low Sheen use an advanced 'gloss reduction system'.

### In The Factory

High Speed Dispersion Technology ensures that all component materials in DURAPOL 1012 Semi Gloss, DURAPOL 1013 Super Satin and DURAPOL 1014 Low Sheen are reduced to the minimum particle size.

#### On The Job

The technology promotes ready reincorporation of the matting agent by simply shaking the can for a few minutes. Shaking or stirring of DURAPOL 1012 Semi Gloss, DURAPOL 1013 Super Satin and DURAPOL 1014 Low Sheen prior to application is essential.

### The System

DURAPOL 1012 Semi Gloss, DURAPOL 1013 Super Satin and DURAPOL 1014 Low Sheen is best applied over two build coats of either:

DURAPOL 1045 Super Gloss DURAPOL 1044 Cork and Timber Gloss TITAN Gloss POLYTHANE 2043-A/B Two Pack

(The Two Pack Gloss may require slightly more sanding of the surface with the screen back or sandpaper to ensure adequate 'wetting')

 The build coats may be catalysed with DURAPOL 5995 Accelerator to provide for a one day system (please consult your Polycure Representative for more advice). DURAPOL 5995 Accelerator CAN NOT be added to DURAPOL 1012, 1013 or 1014.

## **Application**

Refer to the appropriate product Data Sheet for full application details.

Apply with a 6mm nap roller. Do NOT USE wool applicators or long nap rollers.

The reason for this is:

- A uniform and thin film is the basic requirement for a uniform satin appearance across the floor.
- Lambs wool applicators and long nap rollers make it significantly more difficult to avoid uneven application of the wet film.

- Ensure that the underlying build coat is 'flat'. Some of the roller stop / start and edge marks found on subdued gloss finished floors upon analysis have shown that they actually mirror the stop / start and roller edge marks of the previous build coat.
- Best results are obtained with application in one direction only. On strip timber, apply in the board direction, with the wet edge at a board edge. Cross-directional application will increase the chances of a 'patchy' result. This is because of 'grain effect', increased loss of wet edge and over working of the product.

# Use of DURAPOL Accelerator, Wet Edge Extender, and Other Additives

- DURAPOL 5995 Accelerator is not to be used with subdued gloss coatings.
- Wet Edge Extender 3320 can be used in DURAPOL 1012 Semi-gloss, DURAPOL 1013 Super Satin and DURAPOL 1014 Low Sheen. In general, if the application technique requires a wet edge to be 'open' longer, you may elect to add Wet Edge Extender 3320 all the time, only varying the quantity from cool to warm weather. In hot or humid conditions where the drying of the coating may be too quick (with consequences of orange peel, edge marks, etc..) the addition of Wet Edge Extender 3320 added at a ratio of 3 % ( 30ml per litre ) will overcome most problems by retarding viscosity increase.
- Super Cleaning Solvent 3300 MUST NOT BE ADDED to any of Polycure finishes. Inadvertent use will promote gasification of the coating and create gel particles.
- Polycure Thinners 3310 or Wet Edge Extender can be used at 3% or 30 ml per litre to reduce the viscosity of DURAPOL 1012 Semi-gloss, DURAPOL 1013 Super Satin and DURAPOL 1014 Low Sheen.

# **Trouble Shooting Guide**

CONDITION	CAUSE	ADVICE
"Flocculation", "Motley" or "orange peel" surface	Coating film applied too thick.     Surface temperature too low     Inadequate mixing     Over thinning	<ul> <li>Sand existing coat flat</li> <li>Heat the room</li> <li>Mix the coating thoroughly before use</li> <li>Reduce viscosity by using Wet Edge Extender 3320 added at 3%.</li> </ul>
"Roller Edge" and / or "Stop - Start" marks	<ul> <li>Coating film applied too thick.</li> <li>Surface temperature too low</li> <li>Weighted end of roller facing wet coating</li> <li>Not adequately 'feathered in' at roller edge</li> <li>Coating drying too fast</li> <li>Underlying gloss coat has high spots</li> </ul>	<ul> <li>Reduce viscosity by using Wet Edge Extender 3320 added at 3%.</li> <li>Ensure weighted end of roller is facing away from wet film.</li> <li>Improve feathering technique, maybe with a lighter pole</li> <li>Consider roller brand with reduced nap</li> <li>Improve feathering technique of the build coats</li> <li>Do not overwork product</li> </ul>
Variance in gloss level	Variance in solvent evaporation speed	Eliminate all sources of direct sunlight onto the floor (newspaper across windows) and all sources of air flow across the floor.
"Patchy", "Flocculation" and "motley" effect	<ul> <li>Cross-directional application</li> <li>Drying too fast</li> <li>Inadequate mixing</li> <li>Coating film applied too thick.</li> </ul>	<ul> <li>Reduce viscosity by using Wet Edge Extender 3320 added at 3%.</li> <li>Mix the coating thoroughly before use</li> <li>Use uni-directional application technique</li> </ul>

PLEASE CONTACT POLYCURE'S TECHNICAL SERVICE DEPARTMENT OR YOUR LOCAL POLYCURE
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