## **Registered Product List for Binder Adhesion Agents**

## Issue : RAA/01

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Adhesion Agent	Supplier	Performance Level
Redicote E-16LV	Akzo Nobel Pty Ltd (ABN 59 000 119 424)	1
Agg-Bond 100	Otech Australia (ABN 72 082 678 484)	1
Diamin Tol	Axieo Operations (Australia) Pty Ltd (ABN 88 602 074 322)	1
Aggbind 75	Otech Australia (ABN 72 082 678 484)	1
Rhodaval DA 210	Chemcolour Industries Australia Pty Ltd (ABN 70 125 602 271)	2
Bitumite	Bituminous Products (Pty Ltd) (ABN 19 106 887 094)	2
Aggrebond PC	Victorian Chemical Company Pty Ltd (ABN 36 004 188 863)	2

## Notes:

- 1. Performance Levels 1, 2 and 3 are being assigned (Level 1 providing highest performance) to provide a guide to users of the anti-stripping performance expected from the listed products. In the average case, a 50% difference in relative stripping performance is expected between each level.
- 2. The performance levels have been determined based on binder stripping results obtained on two aggregate types (trachyte, hornfels) over a range of adhesion agent concentrations. They may not reflect a product's anti-stripping performance for other aggregate types.
- 3. It is recommended that only Performance Level 1 products are used for aggregates known to possess high stripping tendencies, and for more demanding applications involving higher risk (e.g. high traffic volume roads, damp aggregate, cold weather).
- 4. The appropriate concentration of binder adhesion agent to be used (% expressed as parts by volume) will depend on the particular characteristics of the aggregate as well as the product's performance level. As a guide, the following are suggested:
  - For Level 1 products, an adhesion agent concentration of 0.3% should be used for aggregates with average adhesion properties and 0.6% for difficult aggregates known to possess high stripping tendencies.
  - For Level 2 and Level 3 products, increasingly higher adhesion agent concentrations will be required but should not exceed 1.0%.
  - Adhesion agent concentrations should be doubled when using polymer modified binders but should not exceed 1.0%.

Use of adhesion agent concentrations above those suggested may cause cutting of the binder with little improvement in adhesion promoting properties.

- 5. Laboratory testing can be performed to determine the optimum concentration of a particular product for local aggregates. Advice on such testing can be provided by Pavements, Research and Innovation.
- 6. As the effectiveness of the adhesion agent is reduced by extended periods of contact with hot binder, it is recommended that the adhesion agent is added to the binder in the sprayer just prior to spraying.

