



Technical Data Sheet No. 204

Two Pack Clear Solvent Free Epoxy Coating

ENVIROTHANE 4111

PRODUCT DESCRIPTION - A & I Coatings ENVIROTHANE 4111 is a clear two pack, solvent free, 100% solids epoxy with excellent surface hardness and adhesion. Envirothane 4111 exhibits high water resistance, chemical and oil resistance with the ability to build virtually unlimited film thickness.

TYPICAL APPLICATIONS

Concrete protection
 Floor Coatings
 Joint repair
 Steel in extreme environments
 Repaints/ maintenance
 Wear resistant coating

TECHNICAL INFORMATION

Vehicle Type : Two component epoxy.

Hardener : Amine.

Mixing Ratio : 2:1(Part A : Part B) by Volume.
Pot life : Approx 30 mins @25°C.

Finish : Gloss.

Colour : Clear and White

Dry time : Touch Dry 6 hours@25°C. (minimum) Tack Dry 16 hours@25°C. Light foot traffic 24 hours@25°C.

Full cure 6 days.

Recoat time: 16 hours minimum. Maximum varies with the environment condition and the topcoat used.
: Dependant on substrate. Contact A & I Coatings technical team for specifications.

Theoretical Coverage: 10m² /litre@100µmDFT (100µmWFT). Dependant on application.

Volume Solids : Virtually 100%. Recommended DFT : 100-200 µm/coat.

Usual no. of coats : 1-2 (dependant on substrate).

Abrasion Resistance: Very good.

Chemical Resistance : Contact A & I Coatings for specific recommendations. Resistant to a wide range of acids

and alkalis, vegetable and mineral oils. Not resistant to strong oxidising acids, phenols or

amines.

Heat Resistance : Up to 120°C (Dry Heat).

Solvent Resistance : Excellent for many solvents.

Thinning : V122 Epoxy Thinners or Methylated Spirits. **Cleanup** : Use V105 or V114 thinners for cleanup.

Durability: Excellent, but will chalk under UV exposure without damage to the integrity of the coating.

Product weight : 1.0 - 1.4 Kg/Litre.

MERITS

- 1. Can be used as a seal coat and also for a subsequent coat for **A & I Coatings**' high performance coating system.
- 2. Exceptionally hard wearing.
- 3. Exceptional filling characteristics when mixed with sand.

LIMITATIONS

- 1. This product will chalk when continuously exposed to sunlight. This chalking in no way impairs the performance of the coating.
- 2. Not to be applied on thermoplastic coating.
- 3. If product is over mixed it will cure too quickly. If under mixed it won't cure.
- 4. A spiked roller may be needed to release air bubbles coming out of a warming slab.



E4111 TDS

APPLICATION DATA

Mixing: Blend Pack A with Pack B to correct ratio. Power stir thoroughly for at least

two minutes prior to use. Allow to stand for 10 minutes in cold weather. Only mix required amount and use within the stated pot life. Add sand as necessary and stir in. If using as an epoxy mortar mix up to 4 parts sand to 1 part epoxy. For self levelling application mix up to 2

parts mixed epoxy to 1 part sand.

Cleaning : Use V105 or V122 Thinners.

Equipment: Airless spray, brush or roller. Trowel when used as a mortar.

Note: If airless spray running too hot, it may set off a faster cure time.

SURFACE PREPARATION

Concrete

Allow new concrete to cure for 28 days prior to coating. Surface must be sound, dry, free from all loose material, laitance, old coatings, dust and surface contaminants (e.g. oil, grease, chemicals, release/curing agents etc).

Smooth or contaminated surfaces must be mechanically treated by abrasive blasting or grinding to achieve a clean anchor pattern for best adhesion. Oily surfaces must be detergent cleaned and water blasted. In some instances acid etch and water blasting may be adequate to form a 'key' for sufficient adhesion.

Sometimes we would recommend the concrete be primed with Envirothane 2100 prior to the application of the Envirothane 4111 dependant on condition. Please note that moisture content in the concrete must be no greater than 4% prior to application of the E4111. Ensure no hydrostatic pressure present.

Rusted Steel

Degrease the surfaces and remove all weld spatter and flux. Grind sharp edges and corners. For best results abrasive blast clean to specified/recommended AS 1627-1 to 9 Class Sa 2.5. Please consult **A & I Coatings** Technical team for particular applications and specifications.

WORK STOPPAGES: Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with **A & I Coatings** recommended cleaner. Once units of paint have been mixed they should not be resealed and it is advised that after prolonged stoppages work recommences with freshly mixed units.

CLEAN UP : Clean all equipment after use with **A & I Coatings** recommended cleaner. It is good work practice to periodically flush out spray equipment during the course of the working day. Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including and delays.

PACKING & STORAGE

Packing : Available in 6L or 15L packs. For other sizes, contact A & I Coatings.

Storage: 12 months if stored in sealed containers away from heat and moisture. Subject to re-

inspection thereafter. Store above 10°C.

HEALTH AND SAFETY: All applicable statutory regulations must be observed in the application of this product. Users must first read the Material Safety Data Sheet for Envirothane 4111. Users should familiarise themselves with all the safety aspects of the product prior to use.

Please ensure the current Technical Data Sheet is consulted prior to specification or application of **A & I Coatings** products. **A & I Coatings** will in many instances provide Area Specific Instruction Sheets which contain detailed instructions on how to achieve desired results for specific areas. If the surface intended to be painted differs from the specification, please consult the **A & I Coatings** Technical team on 1800 819 585.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

Note: The figures quoted for pot life and drying/curing times are not definitive. They are dependent on site conditions, such as volume of material mixed, ambient and substrate temperatures, weather and ventilation.

DISCLAIMER

Since the use and application of this product is beyond our control we cannot be held responsible for product field performance. The information presented above is the result of our considerable experience with this product but is not to be construed as a performance warranty.

For additional information, phone our Customer Service Centre on 1800 819 585.

SEPTMBER 2011 - THIS DATA SHEET SUPERSEDES THOSE PREVIOUSLY ISSUED.