

ENVIROTHANE 8470

TECHNICAL DATA SHEET

Water Based Two Pack Clear or Pigmented UV Stable Polyurethane. Contains antibacterial biocides.



A & I Coatings ENVIROTHANE 8470 is a unique high-performance water borne two pack acrylic polyurethane for concrete and steel protection. It provides ease of use and VOC compliance and is suitable for brush, roller or spray application. This environmentally friendly fast drying coating has very good yellowing and UV resistance on exterior exposure and may be applied in conjunction with epoxy primer and intermediate coats to provide a durable coating system. Has biocides added to give the coating anti-microbial activity and protect from a broad spectrum of bacteria, fungi, and algae.

USES & BENEFITS	Uses • External concrete coating • Structural Steel • Seamless flooring • Masonry • Carparks and Showrooms • Shopping Centres • Commercial Offices • Retail • Storage Facilities																							
	Benefits 1. Exceptional colour retention properties 2. Suitable for brush, roller and spray application 3. Clear contains UV blockers for internal applications to protect the underlying coats. 4. Low VOC 5. Meets Greenstar requirements 6. Resists fungal and bacterial build up. 7. Low odour		Limitations 1. Available only in satin 2. Not to be applied below 10°C and above 85% R.H. 3. Excessive film thickness could cause whitening when used as a clearcoat. 4. Not to be applied direct to concrete 5. Minimum surface temperature should be at least 3°C above dew point at time of application and initial cure.																					
PHYSICAL PROPERTIES	Vehicle Type	Acrylic Polyurethane																						
	Hardener	Water Dispersible Isocyanate																						
	Mixing Ratio	8 : 1 (Pack A : Pack B) by Volume																						
	Pot Life	Approximately 2 hours @ 25µC, dependant on temperature																						
	Finish	Satin																						
	Theoretical Coverage	6.0 – 9.0m²/Litre @ 50 - 70µm(110 - 165µmWFT)																						
	Volume Solids	43%																						
	Recommended DFT	50 - 75µm for depending on substrate and exposure environment																						
	Usual No. of Coats	2 coats																						
	Primer Required	E2000 Clear or E2100 pigmented on concrete and E2300 on steelwork. (A & I Coatings staff can advise on the most appropriate primer coat for a specific task)																						
	Colour	Clear or pigmented																						
	Pigmentation	Various																						
	Product Weight	1.1-1.3Kg/Litre depending on pigmentation																						
	VOC Content	36 grams/Litre																						
ENGINEERING DATA	Abrasion Resistance	Excellent																						
	Chemical Resistance	Envirothane 8470 displays resistance to many common chemicals in spill or splash situations at ambient temperatures. The following chemicals are an example only. Consult A&I for specific applications. <table><tr><td>• Hydrochloric Acid (10%)</td><td>• Kerosene</td><td>• Organic Food Matter</td></tr><tr><td>• Nitric Acid (10%)</td><td>• Turpentine</td><td>• Grease</td></tr><tr><td>• Sulfuric acid (40%)</td><td>• Skydrol</td><td>• Wine</td></tr><tr><td>• Uric acid (concentrated)</td><td>• Hydraulic Fluid</td><td>• Diesel</td></tr><tr><td>• Sodium hydroxide (10%)</td><td>• Brake Fluid</td><td>• Hydrocarbon solvents</td></tr><tr><td>• Hydrogen peroxide (3%)</td><td>• Motor Oil</td><td></td></tr><tr><td>• MEK</td><td>• Toluene</td><td></td></tr></table> Some chemicals may cause surface staining from prolonged exposure without impacting the coating integrity. Data is available on request. Exposure based on spill and splash cleaned within 24hrs.		• Hydrochloric Acid (10%)	• Kerosene	• Organic Food Matter	• Nitric Acid (10%)	• Turpentine	• Grease	• Sulfuric acid (40%)	• Skydrol	• Wine	• Uric acid (concentrated)	• Hydraulic Fluid	• Diesel	• Sodium hydroxide (10%)	• Brake Fluid	• Hydrocarbon solvents	• Hydrogen peroxide (3%)	• Motor Oil		• MEK	• Toluene	
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Dry Heat Resistance	120°C																							
Hot Water Resistance	Up to 70°C																							

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ENGINEERING DATA	Durability	Very Good			
	Solvent Resistance	Good			
	Salt Spray Resistance	Good			
CURING DATA	Substrate Temp.(°C)	Foot Traffic	Vehicle Traffic	Full Cure	Recoat Time min
	25 °C	16 Hrs	72 Hrs	7 Days	4 Hrs, based on good air flow
	Note: When overcoating E8470 with itself, application to occur within 48hrs at 25 °C No water or condensation should contact the coating for 2 days from installation.				
SURFACE PREPARATION	All Substrates	As this product is a topcoat only, refer to the TDS of applicable primer.			
	Repaints	All surfaces should be free from oil, grease, loose paint and other contaminants. Though Envirothane 8470 may give good adhesion, a test patch is always recommended before use.			
APPLICATION DATA	Mixing	Stir Pack A using a power mixer, then blend Pack A with Pack B completely and power stir thoroughly for at least 2 minutes before thinning. Thin 5 – 10% with water if required. NB: Reseal hardener tin well if not fully used.			
	Application	Air or Airless Spray, brush, or roller. (A & I Coatings technical staff can advise on the most appropriate equipment for a specific task).			
	Ambient Temperature	Apply between 8-35 °C			
	Thinning	May be thinned with water as necessary.			
	Cleaning	Clean up with water.			
	Note	This product may be used with non-slip media to achieve various anti-slip ratings. Contact A & I Coatings to discuss your requirements.			
WORK STOPPAGES	General	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 delays).			
PACKING & STORAGE	Packing	Available in 9L packs. For availability of other sizes, contact A & I Coatings.			
	Storage	12 months if stored in sealed containers away from heat & moisture. Subject to re-inspection thereafter.			

All applicable statutory regulations must be observed in the application of this product. Users must first read the Material Safety Data Sheet for Envirothane 8470. 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 onsite 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, or e-mail helpdesk@aicoatings.com Visit our website for more products: www.aicoatings.com