

FULL DESCRIPTION	: EPIGRIP L653 HI-BUILD			
MATERIAL TYPE	: A 2-pack epoxy hi-build coating			
RECOMMENDED USE	: As a high build undercoat or sheen finish, widely approved for the treatment of offshore structures			
ENDORSEMENTS	: Complies with BS5493:1977 - Table 4K - Type KUIB : Complies with BS5493:1977 - Table 4K - Type KFID : Complies with British Gas Standard - BG PA9 Undercoat : BS4766 Part 7 - Surface Spread of Flame Material - for details of substrate/scheme, consult Leighs Customer Service Department			
RECOMMENDED APPLICATION METHODS	: Airless Spray	: Brush		
	: Conventional Spray	: Roller		
COLOUR AVAILABILITY	: Full range			
FLASH POINT	: Base : 28°C	: Additive : 42°C		
% SOLIDS BY VOLUME	: 64 ± 3% (ASTM-D2697-91)			
V.O.C.	: 352 gms/litre determined practically in accordance with UK Regulations PG6/23 : 357 gms/litre calculated from formulation to satisfy EC Solvent Emissions Directive : 252 gms/kilo content by weight from formulation, to satisfy EC SED			
TYPICAL THICKNESS	: Dry film thickness : 125 microns	: Wet film thickness : 195 microns	: Theoretical coverage : 5.1 m ² /ltr*	
	* This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment. Film thickness will vary depending on actual use and specification.			
PRACTICAL APPLICATION RATES- microns per coat		Airless Spray	Conventional Spray	Brush
	: Dry	125*	125	50
	: Wet	195	195	78
		* Maximum sag tolerance typically 200µm dry by airless spray.		
AVERAGE DRYING TIMES	: At 15°C	: At 23°C		
	To touch : 2 hours	1½ hours		
	To recoat : 6 hours	4 hours		
	To handle : 24 hours	16 hours		
	These figures are given as a guide only. Factors such as air movement and humidity must also be considered.			
RECOMMENDED THINNER	: Leighs Cleanser/Thinner No. 5			
RESISTANCE TO	: Moisture - Excellent	: Aliphatic solvents - Excellent		
	: Acid spillage - Moderate	: Abrasion - Excellent		
	: Alkali spillage - Excellent	: Weather - Excellent (subject to chalking)		
	: Petroleum solvents - Excellent			
RECOMMENDED PRIMERS	: Epigrip L425 Zinc Phosphate Primer : Epigrip J984 Zinc Rich Primer : Dox-Anode D5V2/Epigrip M330 Sealercoat			
RECOMMENDED TOPCOATS	: Indefinitely overcoatable with epoxy systems provided the surfaces to be coated have been suitably cleaned. Where a high degree of gloss and colour retention is required overcoat with Resistex C137V2, Resistex C237, Resistex K651 within 7 days at a minimum dft of 50 microns. These overcoating times refer to achievement of optimum adhesion at 23°C and will vary with temperature. : For overcoating with alkyd systems consult Leighs Customer Service Department for advice.			
POT LIFE	: 4 hours at 15°C	: 3 hours at 23°C		
PACKAGE	: A two component material supplied in separate containers to be mixed prior to use			
	Pack Size	: 20 litre and 5 litre units when mixed		
	Mixing Ratio	: 4 parts base to 1 part additive by volume		
	Weight	: 1.49 kg/litre (may vary with shade).		
	Shelf Life	: 2 years from date of manufacture or 'Use By' date where specified.		

SURFACE PREPARATION:

Ensure surfaces to be coated are clean, dry and free from all surface contamination.

APPLICATION EQUIPMENT:

Airless Spray

Nozzle Size : 0.53mm (21 thou)
Fan Angle : 80°
Operating Pressure : 155kg/cm² (2200 psi)

The airless spray details given above are intended as a guide only. Details such as fluid hose length and diameter, paint temperature and job shape and size all have an effect on the spray tip and operating pressure chosen. However, the operating pressure should be the lowest possible consistent with satisfactory atomisation. As conditions will vary from job to job, it is the applicators' responsibility to ensure that the equipment in use has been set up to give the best results. If in doubt Leighs Customer Service Department should be consulted.

Conventional Spray

Nozzle Size : 1.27mm (50 thou)
Atomising Pressure : 3.5kg/cm² (50 psi)
Fluid Pressure : 1.1kg/cm² (15 psi)

The details of atomising pressure, fluid pressure and nozzle size are given as a guide. It may be found that slight variations of pressure will provide optimum atomisation in some circumstances according to the set up in use. Atomising air pressure depends on the air cap in use and the fluid pressure depends on the length of line and direction of feed i.e. horizontal or vertical.

For application by conventional spray, it may be necessary to thin the paint by the addition of up to 10% Leighs Cleanser Thinner No. 5. Where thinning has been carried out, the wet film thickness must be adjusted accordingly.

N.B. Thinning will affect VOC compliance.

Brush

The material is suitable for brush application. Application of more than one coat may be necessary to give equivalent dry film thickness to a single spray applied coat.

Roller

The material is suitable for roller application. Application of more than one coat may be necessary to give equivalent dry film thickness to a single spray applied coat.

APPLICATION CONDITIONS AND OVERCOATING:

Epoxy materials should preferably be applied at temperatures in excess of 10°C. In conditions of high relative humidity, ie 80-85% good ventilation conditions are essential. Substrate temperature should be at least 3°C above the dew point and always above 0°C.

At application temperatures below 10°C, drying and curing times will be significantly extended, and spraying characteristics may be impaired.

Application at ambient air temperatures below 5°C is not recommended.

In order to achieve optimum water and chemical resistance, temperature needs to be maintained above 10°C during curing.

If it is desired to overcoat outside the times stated on the data sheet, please seek advice of Leighs Customer Service Department.

For full notes, see data sheet entitled 'Spreading Rates and Overcoating Times'.

ADDITIONAL NOTES:

Drying times, curing times and pot life should be considered as a guide only.

The curing reaction of epoxies commences immediately the two components are mixed, and since the reaction is dependent on temperature, the curing time and pot life will be approximately halved by a 10°C increase in temperature and doubled by a 10°C decrease in temperature.

Epoxy Coatings - Colour Stability:

Variable colour stability is a feature of epoxy materials which tend to yellow and darken with age whether used on internal or external areas. Therefore any areas touched-up and repaired with the same colour at a later date may be obvious due to this colour change.

When epoxy materials are exposed to ultra-violet light a surface chalking effect will develop. This phenomenon results in loss of gloss and a fine powder coating at the surface which may give rise to colour variation depending on the aspect of the steelwork. This effect in no way detracts from the performance of the system.

Numerical values quoted for physical data may vary slightly from batch to batch.

HEALTH AND SAFETY:

Consult Product Health and Safety Data Sheet for information on safe storage, handling and application of this product.

Any person or company using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk, and Leighs Paints can accept no liability for the performance of the product, or for any loss or damage arising out of such use.

The information detailed in this Data Sheet is liable to modification from time to time in the light of experience and of normal product development, and before using, customers are advised to check with Leighs Paints, quoting the reference number, to ensure that they possess the latest issue.