Protective & Marine Coatings

EPIGRIP J984
PRODUCT TECHNICAL DATA

Revised 02/2013 Issue 15

PRODUCT INFORMATION

PRODUCT DESCRIPTION

EPIGRIP J984 RICH PRIMER

Material Type: A 2-pack epoxy zinc rich anti-corrosive primer.

RECOMMENDED USE

Anti-corrosive protection of steel surfaces prepared by abrasive blast cleaning.

May be used as a repair primer for galvanised surfaces

ENDORSEMENTS

Conforms to ISO 12944-5:1998 (E) - 5.2

RECOMMENDED APPLICATION METHODS

Airless Spray
Brush (for small areas and touch up only)

Recommended Cleanser/Thinner: No 5

PRODUCT CHARACTERISTICS

Flash Point: Base : 23°C Additive : 23°C

% Solids by Volume: 62 ± 3% (ASTM-D2697-91)

Pot Life: 10 hrs @ 15°C, 8 hrs @ 23°C, 4 hrs @ 35°C

Colour Availability: Grey

VOC
331 gms/litre determined practically in accordance with UK Regulations PG6/23
399 gms/litre calculated from formulation to satisfy EC Solvent Emissions Directive
160 gms/kilo content by weight from formulation, to satisfy EC SED

TYPICAL THICKNESS

Dry film thickness	Wet film thickness	Theoretical coverage
50 microns	81 microns	12.4 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	Brush
Dry	50*	40
Wet	81	65

** Maximum sag tolerance typically 100µm dry by airless spray*

AVERAGE DRYING TIMES

	@ 5°C	@ 15°C	@ 23°C	@ 35°C
To touch:	15 minutes	12 minutes	10 minutes	5 minutes
To recoat:	6 hours	5 hours	4 hours	3 hours
To handle:	16 hours	14 hours	12 hours	10 hours

These figures are given as a guide only. Factors such as air movement and humidity must also be considered.

RECOMMENDED PRIMERS / TOPCOATS

Indefinitely overcoatable with epoxy systems provided a minimum of 50 microns dft is obtained.

See additional Notes – Exposure to weathering overleaf.

Do not overcoat with paints containing saponifiable resins such as oleo-resinous or alkyd based paints unless a non-saponifiable resin based barrier coat has been applied first.

PACKAGE

A two component material supplied in separate containers to be mixed prior to use

Pack Size:	10 litre and 5 litre units when mixed
Mixing Ratio:	4 parts base to 1 part additive by volume
Weight:	2.62 kg/litre
Shelf Life:	18 months from date of manufacture or 'Use By' date where specified

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SURFACE PREPARATION

Blast clean to Sa2½ BS EN ISO 8501-1:2007. Average surface profile in the range 50 - 75 microns.
Ensure surfaces to be coated are clean, dry and free from all surface contamination.
For repair of galvanizing, for small areas, abrade the surface to a minimum standard of St3 BS EN ISO 8501-1:2007 feathering off the edges of intact galvanizing surrounding such areas, and then brush apply the primer.
For large areas it is recommended that the surface is flash blasted and the primer applied by the desired method.

APPLICATION EQUIPMENT

Airless Spray

Nozzle Size:	0.38mm (15 thou)
Fan Angle:	40°
Operating Pressure:	115kg/cm² (1600 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 Sherwin-Williams should be consulted.

Nozzle Size
Environmental legislation now requires paint to contain less solvent. When using high solids coatings like Epigrip J984 Zinc Rich Primer, painters must use finer spray tips than previously to compensate for the natural tendency towards over-application and to help achieve good wet film formation.

Brush
The material is suitable for brush application to small areas and for touch up purposes. 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 paints should preferably be applied at temperatures in excess of 10ºC. In conditions of high relative humidity, ie 80-85% good ventilation conditions are essential. Substrate temperature should be at least 3ºC 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 10ºC during curing.

If it is desired to overcoat outside the times stated on the data sheet, please seek advice of Sherwin-Williams.

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.

Exposure to Weathering
If Epigrip J984 is exposed to the weather, there is a risk of the formation of zinc salts on the surface, which must be removed by flash blasting or washing down prior to overcoating, otherwise intercoat adhesion may be adversely affected. The rate of zinc salt formation will vary from one location to another. Under severe conditions e.g. marine coastal, offshore or heavy industrial areas, it is strongly recommended that overcoating takes place within 7 days.

Epoxy Coatings - Tropical Use
Epoxy paints at the time of mixing should not exceed a temperature of 35°C. At this temperature the pot life will be approximately halved. Use of these products outside of the pot life may result in inferior adhesion properties even if the materials appear fit for application. Thinning the mixed product will not alleviate this problem.

The maximum air and substrate temperature for application is 50°C providing conditions allow satisfactory application and film formation. If the air and substrate temperatures exceed 50°C and epoxy coatings are applied under these conditions, paint film defects such as dry spray, bubbling and pinholing etc. can occur within the coating.

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.

WARRANTY