

TECHNICAL PRODUCT DATASHEET

Dacfree 584

Dacfree 584 is a 2-pack acrylic, isocyanate-free finishing coat for structural steel, galvanised fabrications and similar, with the ability to be a one-coat primer/finish for galvanised fabrications. As a result, along with being high-build with a high sheen finish, **Dacfree 584** provides excellent adhesion and colour retention for extended durability.

PRODUCT INFORMATION

Coating type:
2-pack acrylic

Reference number:
84-LINE/584-LINE

Features and benefits:

- Isocyanate free
- Excellent adhesion and colour retention for extended durability
- Direct-to-metal for environments up to C2 of ISO 12944: 2018
- Rapid curing properties
- One-coat primer/finish for galvanised fabrications

Appearance:

High sheen (*other gloss levels may be available to special order – contact Dacrylate Customer Services for further details*)

Colours available:

All British Standard and RAL colours, including colour matching – *contact Dacrylate Customer Services for further details*

TECHNICAL INFORMATION

Theoretical coverage:

5.3m² per litre at 120 microns dry film thickness

Recommended primers:

- **May be applied direct-to-metal over mild steel**
 - Epidac Primer Range (79-LINE/90-LINE)
- Contact Dacrylate Technical Team for specific recommendations*

Film thickness:

	Wet film thickness	Dry film thickness
Typical:	190 microns	120 microns
Range:	150-220 microns	50-140 microns

V.O.C.:

324g/m²/litr EPA Method 24
249g/m²/kg calculated from formulation to satisfy EU Solvent Emissions Directive.
May vary with colour.

Sag tolerance:

300 microns wet film thickness

% Volume solids:

64% calculated from laboratory formulation
May vary with colour.

TECHNICAL INFORMATION

Drying time:

Temp.	Touch dry	Firm dry	Overcoat
5°C	6 hrs	16 hrs	16 hrs
10°C	4 hrs	12 hrs	12 hrs
15°C	3 hrs	10 hrs	10 hrs
20°C	2 hrs	8 hrs	8 hrs

Drying time will vary with temperature, air movement, etc.

SURFACE PREPARATION

Paint preparation before use:

Stir the base component thoroughly, then add the activator to the base in the ratio mentioned below. Mix the activator and base until they become homogenous.

Mixing ratio by volume:

9-part bases to 1-part activator

Surface preparation:

All surfaces to be coated should be clean, dry, and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Galvanised steel (new):

Degrease using Dacrylate Thinner R5 and pre-treat with T Wash (150-23), followed by Epidac ZP (79-458) or Epidac 121 (90-270). *Contact Dacrylate Technical Team for specific recommendations.*

Direct application to galvanised steel:

Degrease using Dacrylate Thinner R5 followed by a light abrade or degrease using Thinners R5 followed by T Wash (150-23).

Steel:

Remove corrosion and millscale by preferably abrasive blasting to ISO 8501-1 SA2.5. or manual clean by chipping, scraping or power wire brush to ISO 8501-1 ST3 and degrease with Thinners R5. May be applied direct-to-metal or over recommended primer.

APPLICATION

Application conditions:

This material should preferably be applied at temperatures more than 10°C. Relative humidity should not exceed 90% and in these conditions good ventilation is 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.

Airless spray:

Tip size: 11-13thou (0.33-0.38mm)
Tip pressure: 2250-2500psi (155-172bar)

Conventional spray:

Tip size: 55 thou (1.4mm)
Tip pressure: 40-60psi (2.76-4.14bar)

Brush application:

Apply evenly with a full wet brush. A second coat maybe required to achieve stated dry film thickness.

Roller application:

Apply evenly with a full wet roller. A second coat maybe required to achieve stated dry film thickness.

Thinning:

Up to 10-15% of Dacrylate Thinner R9 may be required when conventionally spraying the product to achieve optimum spray characteristics.

Clean-up:

Clean all equipment after use with Dacrylate Thinner R9. Do not allow product to remain in hoses, guns, or spray equipment. All surplus product should be disposed of in accordance with appropriate regional regulations/legislation.

STORAGE AND PACKAGING

Storage:

Under cover within temperature range of 5°C to 32°C.
Keep containers dry and tightly sealed to avoid moisture contamination.

Shelf life:

2 years in unopened containers when stored under cover within a temperature range of 5°C to 32°C.

Pot life (at 20°C):

10 hours

Packaging:

5 and 20 litre composite packs

HEALTH AND SAFETY

Please refer to the following data sheets:

84-LINE 20595 Dacfree 584 (Base)

84-LINE 20596 Dacfree 584 (Activator)

All work involving the application and use of this product should be performed in compliance with all relevant national, health, safety & environmental standards, and regulations

ADDITIONAL NOTES

The application and spray information given above is intended as a guide only. As conditions vary from job-to-job, it is the applicators responsibility to ensure all equipment in use has been set up to give the best results. **Dacfree 584** will cure at temperatures down to 0°C, however at temperatures below 15°C, the base and hardener will thicken considerably and affect application characteristics. At low ambient temperatures we would advise that base and hardener are warmed separately to 20°C before use to ensure optimum application properties. Certain products retain solvents for longer periods, which will affect plasticizers within the plastic packaging causing damage to the finish. It is therefore not recommended that finished painted products be wrapped in bubble wrap, plastic sleeves etc, until coatings are fully cured as this can cause damage to the finish especially when stacked or stored in sunlight/elevated temperatures. Damage can also occur from condensation caused by fluctuations in temperature consequently causing a "greenhouse" effect within the packaging. Polychromatic colours such as RAL 9006 and RAL 9007 may be susceptible to slight variations in colour depending on application methods and the type of paint. To obtain the best colour and appearance, these colours are best spray applied.

IMPORTANT INFORMATION

The information supplied in this product datasheet is not intended to be exhaustive. Any person using the product for any other purpose than that specifically recommended in this product datasheet, without first obtaining written confirmation from Dacrylate Technical Services as to the suitability of the product for the intended purpose does so at their own risk. All advice given about the product is correct to the best of our knowledge, however we have no control over the condition of the substrate, preparation or the many factors affecting the use and application of the product. Therefore, unless specifically agreed in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product.

Dacrylate warrants its products to be free from defects in material and workmanship. Dacrylate's obligations and buyer's exclusive remedy relating to the products shall be limited, at Dacrylate's option, to either replace the products not conforming the warranty or the credit of the buyers account in the invoiced amount of the non-conforming product. Any claim under this warranty must be made by the Buyer to Dacrylate in writing within five (5) days of the Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. The Buyer's failure to notify Dacrylate of such non-conformance as required herein shall bar the Buyer from recovery under this warranty.

The information detailed in this datasheet is liable to modification from time-to-time in the light of experience and our programme of product development. Before use, it is the customers responsibility to check with Dacrylate Customer Services, quoting the product reference number and version reference at the bottom of the data sheet, to ensure that they have in their possession the latest issue.

Technical product datasheets are available from our website at www.dacrylate.co.uk and should be the same as this datasheet. Should there be any discrepancies between this document and the website version, then please contact Dacrylate Customer Services.

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