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Data sheet B728

Page 1 of 2 February 2012

ACALOR No. 537

Introduction

ACALOR No. 537 is a high build, hard wearing, easily cleaned epoxy solvent based floor coating.

ACALOR No. 537 provides excellent resistance to a wide range of corrosive chemicals and the aero engine hydraulic fluid skydrol.

ACALOR No. 537 can be optionally made anti-slip, however this will reduce the ease with which the floor can be cleaned.

ACALOR No. 537 is available in a standard range of attractive colours, but is not primarily a decorative floor finish.

It is essential that good house-keeping practices are maintained at all times to maximise the performance of APML Resin Flooring Systems.

Typical Applications

Aircraft hangars - skydrol resistant, warehouses, chemical plant floors, storerooms

Method of Use Storage

All materials must be stored prior to use under cover, preferably in a dry heated store. Materials stored at low temperatures (below 10° C) become more viscous and thus difficult to mix and apply. Do not store below 5° C.

If crystals are observed due to low temperature storage, contact APML Technical Sales Department.

Surface Preparation

Where rising damp is likely to be a problem, an efficient damp proof membrane should be installed beneath the concrete screed.

New Floors

New concrete floors should be **thoroughly dry** (moisture content not higher than 5% measured at a depth of 20mm with a Protimeter "Concreterflaster") and fully aged before any work is commenced i.e. 28 days.

The surface must be free from laitance and non-polished. A wood float finish is ideal

If it is necessary to remove laitance this should preferably be done by grit-blasting or grinding. Alternatively **PML Etch** may be applied in accordance with Data Sheet No. 608.

Very smooth and dense floors - i.e. those which have been power floated - may need to be grit-blasted or coarse ground in order to remove surface polish and provide the necessary open texture.

It is essential that any dust created during preparation is completely removed with an industrial vacuum cleaner.

Proprietary floor sealers of the silicate or silicofluoride type must not be used prior to application of ACALOR No. 537 flooring.

Old Floors

All traces of oil, grease or other contaminants must be removed.

The following alternative methods may be used, in order of preference:-

- (a) Grit-blasting, mechanical grinding or planing.
- (b) High pressure hot water cleaning using heavy duty detergent followed by thorough rinsing with clean water.
- (c) Mechanical scrubbing with a heavy duty detergent or proprietary floor cleaner followed by thorough rinsing with clean water

After cleaning by methods (b) and (c) above, apply **PML Etch** in accordance with Data Sheet No. 608.

After finally washing down, the floor must be allowed to dry thoroughly before applying ACALOR No. 537 flooring. The use of hot air blowers will be beneficial.

Caution: where silicate or silicofluoride sealers or any type of surface coating have been used it is essential that these are first removed by method (a) above before applying ACALOR No. 537 flooring.

Certain types of coating may be difficult to remove by grinding and in such cases the APML Technical Sales Department should be consulted for advice.

Ambient Temperature

The ambient temperature should be at least 15°C during application and curing. If necessary heating should be applied sufficiently in advance of the time of application to ensure that the temperature of the floor and surrounding air is at least this level before commencing work.

Application of ACALOR No. 537

ACALOR No. 537 is supplied as a two component pack. The mixing liquid component consists of a blended mixture of epoxy resins and colour pigments, to which is added a hardener component. **Thoroughly** mix the two components together with a palette knife, flat piece of wood or preferably a slow speed drill fitted with a mixing paddle. Thin the first coat with 10-15% of **ACALOR No. 537 Thinner** (35/18 Thinner).

Apply the mixed material with a lambswool or long pile synthetic fibre roller. Cut in any edges etc. by brush. Spread uniformly over the primed surface ensuring good 'wetting'.

Normally two coats are applied, the second coat being applied after the first coat has become almost hard (12-24 hours).

To aid even application, the ACALOR No. 537 may be thinned with up to 10% Thinner

If it is not possible to apply the second coat within this time period then it is essential that the first coat is lightly abraded with a belt sander in order to provide a mechanical key. Vacuum dust.

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Optional Anti-Slip Finish

To provide an anti-slip finish, lightly sprinkle PML 40 Mesh Anti-Slip Aggregate at a rate of 0.1kg/m² into the first coat of ACALOR No. 537 whilst it is still wet. Apply the second coat of ACALOR No. 537 in the usual manner.

Cleaning

All tools and mixing vessels should be cleaned immediately after use with **PML Resin Cleaner** (Data Sheet No. 610) before surplus material cures.

Technical Specification

General data for guidance purposes only (Approximate figures)

Packing	6.5 kg pre-weighed packs or bulk in 25 kg drums
Mixing ratio for bulk supplied material	Mixing Liquid 10 parts Hardener 3 parts (by weight)
Density of mixed material	1.4 kg/litre
Volume of 6.5 kg pack	4.6 litres
Coverage per 6.5 kg pack	Approximately 15m² for 2 coats
Dry film thickness (2 coats)	275 microns
Pot life	30-40 minutes at 20°C
Cure time at 15°C	Approximately 48 hours to accept foot traffic, 4 days to accept heavy traffic or 7 days before chemical exposure
Shelf life	12 months minimum
Thermal Properties (Approximate figures)	
Maximum service temperature	60°C Continuous 90°C Spasmodic

Chemical Resistance

ACALOR No. 537 is resistant to the effects of a wide range of chemicals however it is important that advice is sought from the APML Technical Sales Department before the product is specified.

Health and Safety

This product contains substances that are classified as hazardous according to the Chemicals (Hazard Information and Packaging for Supply) Regulations, 1984 (as amended). The product is labelled in accordance with these regulations and further information regarding health hazards, handling, storage etc. is detailed in the Material Safety Data Sheet(s). In addition to considering the advice given by APML Ltd., all users must conform to the Control of Substances Hazardous to Health Regulations, 1994 (as amended).

All coverages and thicknesses quoted are nominal and will be affected by substrate profile and porosity.

The information in this Data Sheet, given in good faith, is based on results gained from experience and tests. Since application and use are beyond our control, no condition or warranty is given covering the results from the use of our products in any particular case, whether the purpose is disclosed or not, and we cannot accept any responsibility for any loss or damage, howsoever caused arising from the said use.