

## Tuffcab Technical Data Sheet

### Grade C33-27

#### Description

C33-27 is a rapid drying, tough, durable, thixotropic, acrylic based surface coating which can be coloured to a customers' own requirements based on either RAL or Pantone shades.

C33-27 is ideal for use in the speaker manufacturing and flight case manufacturing industries.

#### Properties and Uses

C33-27 is a thixotropic coating which retains the application texture when dry. The textured pattern may be changed to that required by the use of different application methods providing differing finishes.

When spraying C33-27 the pattern may be varied by use of the balance between the feed pressure, the atomising air pressure and volume and excellent effects may be obtained by applying a fine coating over-sprayed with a more course pattern either wet on wet or wet on dry. Further advice on spray patterns may be obtained from our technical department.

C33-27 dries to a high gloss, has good stain resistance, excellent hardness with good durability and an excellent film clarity. It is based on a self cross-linking polymer which imparts water resistance when dry, ensuring the coating is suitable for a variety of uses. It may be coloured to provide either a translucent or opaque film, and uncoloured provides a thixotropic varnish.

A clear version containing glitter is also available which provides a unique finish particularly when applied over either a coloured version of C33-27 or a coloured stain. The clear version when applied textured will give an effect similar to patterned glass and as with patterned glass it will reflect the light giving a translucent effect.

C33-27 provides an excellent finish for cabinets and cases in both MDF and wood, wicker work, clay products, tin and many other products.

C33-27 is not suitable for applying over products which contain solvents including cellulose eg fillers, paints or primers. If solvented paint has been used and sanded down the solvents may remain in the wood and we therefore recommend a small area is tested first.

#### Physical Properties

Viscosity @ 23°C Brookfield RVT 5/20	Thixotropic - not applicable
Total Solids %	40 - 50
pH	5.0 - 7.0
Film Appearance	Glossy, textured
Minimum Film Forming Temperature	5°C
Coverage Rough Finish	Over 2.5m <sup>2</sup> per kg

The above data represents typical values obtained from different batches of C33-27.

#### Application Equipment

C33-27 may be applied by Spray, brush, roller or paint pad.

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C33-27's thixotropic properties ensure that the application texture will remain when dried. For spray application, we have carried out trials with Hi-Tec Spray Ltd and have found the following equipment to give the most consistent finish:

Smooth Coat only

Graco air assisted airless spray unit (President 30:1 ratio), 7.5m of air and fluid hose, Graco AA Plus spray gun Spray tip size: 13thou aperture, Spray Angle 500, Pump fluid pressure 2500psi, Atomising Air Pressure 50psi, Features no overspray

### **Textured Finish**

We found the best finish was achieved by a smooth coat which was allowed to dry before overspraying with a spatter or spot finish. Although the above equipment would be best suited for the smooth coat, we realise most customers prefer not to have 2 separate pieces of equipment, hence we found the following to give the finish usually required.

### **Smooth Coat:**

Devilbiss GTI "Compliant" pressure feed airspray gun, Graco Triton 1:1 pressure ratio feed pump, 5m of air & fluid hose. Air Cap: 110 Transtech, Spray Nozzle/Tip Size: 1.4m/m aperture, Pump Fluid Pressure: 25psi, Atomising Air Pressure: 25psi.

Spatter Coat: As above but with Air Cap: Sagola Internal mix (please note to use this air cap successfully the Pump fluid pressure and the atomising air pressure must be identical. The spot size may be adjusted by changing the pressure settings. In order to prevent banding of spray passes it is advised by Hi-Tech that there is a distance of at least 1m between the gun & work surface. Changes to the air pressures and fluid pressure may be necessary due to differences in humidity, ambient working temperatures etc. The above figures were the settings used when our trials were performed. Further details on the spray equipment can be obtained either from Hi-Tech Spray Ltd or from ourselves.

## **Health & Safety**

C33-27 is non toxic and is not harmful if handled with normal care. It should not however be ingested. Care should be taken to prevent contact with skin and eyes. Splashes should be thoroughly rinsed with water. The adhesive is water based and is therefore non-flammable. Spillage can be absorbed with sawdust or other suitable material. Small quantities may be washed away with water according to Local Authority Regulations. Please consult the relevant Health & Safety Data Sheet for more detailed information.

## **Storage**

To ensure safe storage, containers should be well sealed to prevent evaporation of water and the formation of skin on the surface. The emulsion must be stored at a temperature above freezing. A temperature of 5 – 25°C for not more than 6 months is recommended. Higher temperatures will affect quality and cause the formation of crusts and skins, especially if the containers are not tightly closed or subjected to direct sunlight for long periods. If these conditions cannot be met, please refer to our Technical Department who will advise on storage stability.

## **Other Information**

The information contained on this data sheet is provided in good faith but without warranty. Blue Aran Ltd. reserves the right to periodically review and update the information presented. The information should not be construed as guaranteeing specific performance properties. The product should be fully tested by the user to ensure its suitability for the intended purpose.

The user should regularly update himself regarding the current safety legislation affecting this product, and the relevant Health & Safety Sheet for this product should be consulted before application commences. Further advice on the recommended applications and limitations of this product may be obtained by contacting Blue Aran Ltd.