Dulux® Flatting Base 3.12

What is a Flatting Base?

A flatting base is a **matting additive** that is conventionally incorporated into paint systems in order to produce a coating with a reduced gloss level. Depending on the amount of flatting base used, the final appearance of the coating can range from a **satin to matt finish**. Low gloss or matt surfaces are sought after for their anti-glare properties, visual appearance or simply to meet fashion requirements.

How do Flatting Bases Work?

Flatting bases contain additives such as **silica, waxes or filler pigments** which once added to paint create a **micro-rough surface** after the coating has dried. It is this rough surface that **scatters incoming light** to produce the desired matted effect.

Will Flatting Bases Affect the Properties of the Coating?

Depending on the matting agent used some flatting bases **may affect the properties and final performance of the coating**.

Silica is an efficient matting agent and when used at high levels may result in an increase in the final paint viscosity. Waxes tend to float to the top of the surface and hence may affect the surface properties of the coating. Filler pigments need to be dispersed into the paint at the manufacturing stage and will influence the final coating performance.

The Dulux Flatting Base is formulated so that it will not affect the properties or performance of the recommended coating. Its' low binder level also means that the Flatting Base will not affect the mix ratio of the coating. The mix ratio stated in the product data sheet of the recommended coating should be followed.

What Factors Influence the Gloss Level Obtained?

When using flatting bases there are a **number of factors** that need to be controlled as they may **affect the final gloss level** of the coating. These factors can be product related or due to the application or environmental conditions.

The topcoat type and colour selected are some of the **product related** factors that need to be considered. Each product will be unique in (the response to) the amount of flatting base required. Heavily pigmented colours such as Light Tint Bases will require different levels of flatting base than say Clear Tint Bases. It is therefore important to conduct a test to ensure that the required gloss level can be achieved.

Application variables which can affect gloss include the number of passes and the distance from which the product is applied, the wet and dry film thickness, product viscosity and thinning level. Maintaining consistent application techniques will result in more reproducible results.

Conditions that affect the drying of the coating will have an effect on the gloss level of the applied product. Some **environmental conditions** which need to be monitored include humidity levels, atmospheric and substrate temperature and air flow.

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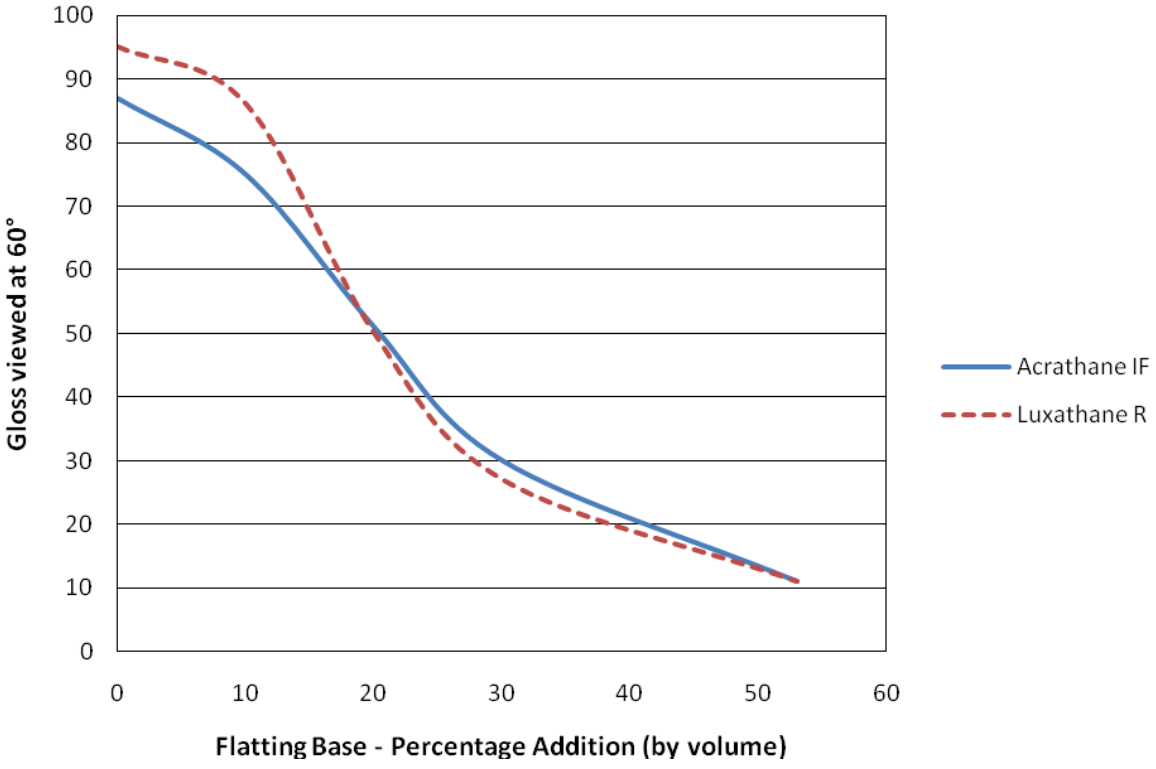
The **Dulux Flatting Base** is an opaque additive that is post added to mixed products to create a matting effect. The Dulux Flatting Base should only be used with **recommended** Dulux Protective Coatings products including **Acrathane® IF and Luxathane® R.**

Addition Levels & Gloss Reduction Chart

Although the level of flatting base can vary depending on the situation a **gloss reduction chart** can provide a guide to the **gloss levels achievable** at different **dosing levels** of flatting base.

Below is a gloss reduction chart for the Dulux Flatting Base used with the **recommended** Dulux Protective Coatings products, Acrathane® IF and Luxathane® R. Using this chart, if you wanted to achieve a gloss of about 25 then to 1L of mixed paint you would add approximately 350ml (ie 35%) of Flatting Base. This graph is only **indicative** and it is recommended that the applicator should test the product for the particular application and conditions prior to use.



How do I use the Dulux Flatting Base?

All cans, including the Dulux Flatting Base and Part A and B components of the product selected must first be **stirred thoroughly** using a power mixer. The **Part A and B components** of the product can then be correctly mixed following the **mix ratio** stated on the product data sheet. Add the required amount of **Dulux Flatting Base** to the mixed paint and incorporate using a **power mixer and brisk stirring**. Once incorporated, thinner can be added until the desired paint viscosity is achieved. The product can then be applied as per normal.

For more information, please contact the Dulux Protective Coatings Technical Consultant in your state.