

ARTICLE: KNB0009

SUBJECT: PREP-CLEAN TECHNIQUES

PAGE 1 of 2



Introduction

The reason for pre-cleaning substrates that are to be coated is to remove grease, oil, silicones, wax & any other contaminant. If this practice is omitted there is a significant risk that the subsequently applied coatings will suffer from a lack of adhesion.

HMG Pre-Cleaners

HMG Paints manufacture 7 pre-cleaners. These different products are designed to ensure that the user has a product suitable for pre-cleaning of all substrates. The products are named: Prep Clean 2800 to Prep Clean 2806. Each of these products has its own Technical Data Sheet, which gives detailed information specific to that product. These products are described briefly below.

Product	Strength	Speed	VOC	Other Info
Prep Clean 2800	Mild	Fast	715	Mildly Anti-static, can be used on painted surfaces
Prep Clean 2801	Mild	Slow	760	Anti-static, can be used on painted surfaces
Prep Clean 2802	Strong	Fast	840	Bare metal cleaner
Prep Clean 2803	Medium	Slow	790	Bare metal cleaner
Prep Clean 2804	Medium	Slow	50	Water based, bare metal cleaner
Prep Clean 2805	Medium	Medium	806	For use on New PVC and other plastics – Anti-Static
Prep Clean 2806	Strong	Medium	840	For use on old PVC and other plastics – Anti-Static
Prep Clean 2807	Medium	Strong	753	Anti-static, can be used on plastics
Prep-Clean 2808	Mild	Medium	780	Anti-static, can be used on plastics

Anti-Static Degreasing

The idea behind anti-static degreasing is to remove all contamination from the surface of the substrate by two methods:

1. Grease and contaminants are removed
2. Static charge on the surface is neutralized.

ARTICLE: KNB0009**SUBJECT: PREP-CLEAN TECHNIQUES****PAGE 2 of 2**

If a substrate contains a static charge when being coated it is more likely to attract dust. Plastic surfaces are especially prone to static charge build up produced by friction (wiping with a cloth) therefore, particular care should be taken when undertaking this process. It is advisable that the Operative takes the following precautions:

- Anti-Static footwear should be worn
- Tyvek overalls should be worn
- Nylon (football shirts etc..) contributes to static build up and should not be worn
- Cotton cloths should be used
- Fire extinguishers should be located in the immediate vicinity

Surface Preparation & Condensation

After a substrate has been degreased the solvent will evaporate. This action requires heat, and that heat is removed from the surface of the substrate. This makes the surface colder than the surrounding atmosphere, which results in condensation on the surface. It should be noted that this condensation is not always visible & that sufficient time must be allowed for the surface to regain the temperature of the surrounding atmosphere. If insufficient time is allowed then moisture can be trapped on the surface, which will result in greatly reduced adhesion. The same problem can also occur if a substrate is placed in a warmer environment than it has been stored in, e.g., if a panel that is to be coated has been stored outside, it should be allowed to acclimatise.

Use of HMG Prep Clean products

Liberal wet a clean, lint free cloth with one of the HMG Prep Clean products and clean / degrease the substrate. While the surface is still wet, apply a second clean, lint free cloth to remove the Prep Clean & contamination trapped within it. Always use two cloths, as using only one will increase the chances of redistributing the surface contamination rather than removing it. Cloths for use with Prep Clean products should be replaced regularly and often to ensure that an efficient pre-cleaning process is maintained.