



TBP Converting, Inc.
Enviro-Shield PDS

Product Information

Description: **Enviro-Shield 804** is a Vinyl Acrylate that is melted at circa 150°C to form a liquid applied coating. The coating cures instantly to form a tough film that will protect flat non-porous surfaces from scratches, abrasion, dirt, sealants and solvents.

Material Type: Vinyl Acrylate.

Color: -White.

Health & Safety: **Enviro-Shield 804** is non-toxic and non-flammable. The dry film waste may be disposed of as low hazard or returned to the supplier for recycling. Please see separate Safety Data Sheet (SDS)

Storage: Shelf life 12 months. Store at temperatures below 30°C. KEEP DRY.

Surfaces: Flat, non-porous surfaces. NOT SUITABLE FOR TEMPERATURE SENSITIVE SURFACES.

Supply - In pellet form

Application Information

Application: By roller coater, slot coater or spray equipment at temperatures of between 150°C - 180°C at a wet film thickness (WFT) of 100 Microns (100 Microns dry film thickness [DFT]). Avoid substrates or surfaces that are temperature sensitive.

Drying Time: A WFT of 100 Microns will be tack free in approximately 2-3 seconds at room temperature.

Coverage: The theoretical coverage rate is approximately 10m² per kg at a WFT of 100 Microns (100 Microns DFT).

Removal: The dry film can be easily removed either by hand peeling or by pressure hose. Do not remove in freezing conditions as the coating may be brittle.

External Weather Resistance: **Enviro-Shield 804** is suitable for up to 12 months exposure. The coating has been successfully tested for 12 months in Northern Europe at 45° south facing.

Clean Down: Allow machine to cool and then peel or providing the material is not contaminated re-start machine and re-use any material that has been left on the rollers.

Repair: If the **Enviro-Shield 804** coating is damaged on site it can be repaired using Protectapeel Multi-Surface T511. A water-based coating that will work with **Enviro-Shield 804** on all surfaces other than acrylic. Do not use Protectapeel Multi-Surface T511 on acrylic surfaces.

Quality Assurance Procedure-Measurement of coat weight for Enviro-Shield 804

Object: It is important **Enviro-Shield 804** is applied to at least 120 grams per square meter (gsm) this procedure provides a test method to determine the actual coat weight applied.

Equipment: Glass preferably 1m². Scales accurate to ± 0.1 g

Method: Coat the glass both sides using the roller coater allow to set then peel one side of the glass. Zero the scales; place the peeled coating on the scales and record the weight in grams. Re zero the scales and peel the second side place the peeled coating on the scales and measure the weight in grams again.

It is important to record the weight relating to each side and which roller upper or lower.

Result: For a glass sheet 1m² the minimum weight recorded per side should be 120 g this will correspond to a minimum coat weight of 120 gsm.

Technical Information

Tensile Strength: >6 MPa

Elongation: >100 %

Adhesion: < 1.0 MPa

Viscosity: 8000 ± 2000 cP @ 180°C

Flash Point: N/A

Density: 0.9 kg l⁻¹

Solids Content: 100%

pH: N/A

Maximum VOC: 0 g l⁻¹

General Note: It is important that this product is thoroughly evaluated under production conditions before being commercially adopted (Such an evaluation should be incorporate a reference to ageing). The above recommendations are made in good faith for the guidance of users and are without liability. Any queries should be referred to our technical Sales Department.