MIROTONE

MIROPOL PE Polyester

Product Information Guide

Innovative Coating Solutions

General Description

Mirotone's range of polyester undercoats provide an ideal base for top coating with MIROTHANE PU polyurethane topcoats. Whether you are looking for an easy to sand undercoat or a premium, high build polyester undercoat to achieve an exceptional high gloss finish, Mirotone has the product you need.

Mirotone's polyester undercoats include MIROPOL PE 5110, 5111 & 5130. Refer to the product data sheets for further information.

Advantages

- High Build
- Excellent Opacity
- Easy Sanding

Recommended Use

Interior MDF and particleboard
Internal doors
Kitchen & Bathroom Cabinets
Commercial Joinery / Wall Panelling
Domestic Furniture

Application Methods

Suction Gun:	Use 1.5 to 2mm (59-79 thou) orifice with 350-400kpa (50-55 psi).
Pressure Pot:	Use 1.5 to 2mm (59-79 thou) orifice with pressure pot air-cap. Gun pressure 350-400kpa (50-55 psi) and a pot pressure of 45kpa (6 psi) max.
Airless Spray:	Use 0.23 to 0.33mm (9-13 thou) orifice, 15cm fan (dependent on job) with regulated pump pressure of 350-400kpa (50-55 psi).
Air Mix Guns:	Settings similar to airless spray with the air-assisted regulator pressure at 70-90kpa (10-15psi).

Mixing Ratio

Standard (100:2:1): 1 Litre Part A + 20ml 5202 Accelerator + 10ml Peroxide (MEKP) Catalyst (Pot Life 1 hr)

Pre-Mixed 2 Pack (100:1): 1 Litre Part A + 10ml Peroxide (MEKP) Catalyst
The 2 pack version will have a purple sticker on the lid showing the date that the 5202 Accelerator was added.

Extended Pot Life (100:1:1): 1 Litre Part A + 10ml 5202 Accelerator + 10ml Peroxide (MEKP) Catalyst (Pot life 3 hrs)

Pot life listed are approximates only and will vary with ambient temperature and quantity mixed.

Always mix 5202 Accelerator into the Part A base before adding the peroxide. Mixing the Accelerator and the Peroxide Hardener together may cause an explosion or fire.
Before handling any products, you must read the Material Safety Data Sheet (MSDS) for the correct personal protection and handling directions. Peroxides are potentially very dangerous and must be treated with the utmost care as there is a risk of serious eye damage.

Force Drying

Flash Off:	10 min at 20°C
Force Dry:	30-45 min at 40-50°C (dependent on airflow)
Cool Down:	10 min at 20°C

Handy Hints

- **High Humidity and Moisture:** All wood will swell and discolour if allowed to come into contact with

water vapour. The protection provided by a coating is dependent on the moisture transmission of the coating and on the thickness of the dry coating film applied. Coated edges are usually the most vulnerable to damage either from the coating being removed or by inadequate film builds in high wear / traffic areas. Special care should always be given to sharp edges as coatings do not build well onto them, resulting in reduced protection in high moisture environments.

- **Damp Wood:** Do not apply coatings over damp wood (moisture content greater than 15%) as it may result in loss of adhesion, cracking or veneer checking of the wood.
- **High Humidity at Time of Application:** Application of coatings at high humidity will speed up the drying process and reduce the pot life.
- **Bridging / Cracking:** Adding excess accelerator or hardener will lead to loss of flexibility of the coating. Do not exceed the recommended wet film thickness as excessive film weights will result in increased potential for cracking of the coating, particularly on routed MDF panels and doors.
- **Inter-coat Adhesion:** To ensure sound inter-coat adhesion, thoroughly sand between coats. To reduce the potential for adhesion failure in field, Mirotone strongly recommends you carry out regular and appropriate quality control testing of your production output.
- **Cold Temperature:** Application below 15°C will affect the drying and gloss level of the coating.

Application System for all Polyester Undercoats

Surface Preparation: Surface must be free from dust, grease, dirt and all contaminants. MIROSOL 1231 Wax & Grease remover can be used to wash the surface to remove wax and grease. Fill all defects with a water based wood filler (i.e. cracks, holes etc).

Sand: Sand surface with 180-240 grit paper. Remove all dust using an air gun and clean lint free cloth.

Undercoat: Apply MIROPOL PE polyester undercoat per the directions on the technical data sheet. Apply one light coat, allow a 10 minute flash off then apply another coat to achieve the desired wet film build. Maximum wet film build (total) is 300 microns, exceeding this increases the risk of cracking in routes and grooves.

Sand: Allow to dry per the technical data sheet and sand with 320-400 grit paper just prior to top coating. Use 400-500 grit paper where a high gloss finish is being applied. Remove all sanding dust. Do not leave sanded panels for longer than 24 hours before top coating as adhesion will be compromised.

Scraping: If scraping is required, the polyester must be mixed 100:1:2.

Topcoat: Apply two coats of one of the listed topcoats per the directions on the technical data sheet:
MIROTHANE PU 5605 Polyurethane Topcoat
MIROTHANE PU 5650 Polyurethane Topcoat
MIROTHANE PU 5610 Polyurethane Topcoat

Product Storage – Organic Peroxide

Peroxide Hardeners are classified as Class 5.2 Dangerous Goods.

Organic peroxides are thermally unstable substances that may undergo exothermic self-accelerating decomposition resulting in explosion, fire or, if permitted to come into contact with other substances may result in a severe reaction.

The following notes relate to Minor Storage where the maximum individual container size is 5 kg and the maximum total quantity for all packages stored on site is 20 kg.

- Store out of direct sunlight in a cool, dry, well-ventilated area below 35°C
- Do not store peroxide within 3 metres of sources of direct heat or ignition sources
- Do not store peroxide within 3 metres of other dangerous goods (including Class 3 flammable

liquids)

- Do not open peroxide containers inside or close to the main peroxide storage area

For further information, and where more than 20 kg of peroxide is stored, refer to AS 2714-1993 The Storage and handling of hazardous chemical materials – Class 5.2 substances (organic peroxides).

Disposal of unused mixed product – once the mixed Polyester has exceeded its pot life it will begin to thicken / gel. The product must be covered with water in order to remove heat from the chemical reaction before disposal.

Health & Safety

Before handling, refer to the Material Safety Data Sheet for health and safety information. Ensure that all personnel using this product have read and understood this data sheet and the associated MSDS and packaging label before using this product.

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