



# MIROCAT PC Clear Coatings

**Product Information Guide** 

Innovative Coating Solutions

# **General Description**

Mirotone's range of clear, pre catalysed coatings are ideal for use on domestic furniture, internal doors and children's toys and furniture. Easy to use and available in a range of gloss levels, Mirotone has the right system to meet your requirements.

#### **Advantages**

- Easy to use with minimal effort and expertise required
- Fast drying to ensure fast production throughput
- Excellent flow and levelling results in smooth level finish
- Topcoat is available in a range of gloss levels

#### **Recommended Use**

Interior use only. Ideal for domestic furniture, children's toys and furniture, picture frames, musical instruments and antique restoration.

When MIROCAT PC 3244 is catalysed with MIROBILD AC 3800 Universal Catalyst and top coated with MIROBILD AC topcoats or MIROTHANE PU 5588 it is ideal for use on kitchen cabinets and commercial furniture.

#### **Product Compliance**

## Children's Toys (Heavy Metal Content) - All MIROCAT PC Coatings

Mirotone's "Chemicals of Concern Policy" requires that all of its wood coatings comply with the following standards that specify stringent limits on the permitted amount of toxic heavy metals:

- AS/NZS ISO 8124.3:2003 (Children's Toy Safety Requirements)
- BS/EN 71-3:1995 (Safety of Toys) Part 3. Specification for migration of certain elements.

# **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).

## **Force Drying**

Flash Off: 5-15 min at 20°C

Force Dry: 10-20 min at 40-50°C (dependent on airflow)

Cool Down: 15 min at 20°C

#### **Handy Hints**

- Not recommended for bar or counter tops, kitchen bench tops or bathroom vanity tops or high humidity or wet areas.
- 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.
- Care must be taken to apply a uniform wet film thickness as gloss level is dependent upon WFT.
- Bridging / Cracking: 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.
- Coating systems with multiple coats of any sealer will increase the risk of the dry film appearing milky (especially when applied over dark stains or wood) and may result in white marking if the film is damaged by sharp objects.
- Cold Temperature: Application below 15°C will affect the drying and gloss level of the coating.
- Clear coatings do not permanently protect the substrate from the ageing / discolouration effects of temperature and sunlight. Even when UV absorbers are present in a coating they will sacrificially break down over time and eventually no longer help protect the substrate.
- Take care when handling as oils or fats from the skin may transfer to the surface of the coating and leave visible finger prints.
- Due care must be taken in harsh in-service environments as coatings can be damaged by sharp objects. Use placements, coasters, table cloths and other protective covering to prevent damage.

## **Application System**

**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.) or fill open grain woods with MIROFIL 1702 if a full high build finish is required.

**Sand:** Sand wood with 180-240 grit paper. Sand MDF with 240-320 grit paper. Remove all dust using an air gun and clean lint free cloth.

Staining: If required, stain substrate. Apply MIROSTAIN per the relevant product data sheet.

**Sealer:** Apply one of the following clear sealers per the instructions on the relevant data sheet:

- MIROCAT PC 3241 Clear Sealer
- MIROCAT PC 3242 Clear Sealer
- MIROCAT PC 3244 Clear Sealer
- MIROTHANE PU 5533 Clear Sealer
- MIROTHANE PU 5545 Clear Sealer

**Toning:** If required to provide extra depth of colour, add up to 10% by volume MIROSTAIN 2010, 2013 (Dye Stain) or unreduced MIROSTAIN 2616 (Pigment Stain). Apply in light even coats over sealed wood to obtain the depth of colour.

**Sand:** Allow to dry per the technical data sheet and sand with 280-320 grit paper just prior to top coating. Use 400-500 grit paper where a high gloss finish is being applied. Remove all sanding dust.

**Topcoat:** Apply two coats of one of the listed topcoats per the directions on the technical data sheet:

MIROCAT PC 3210 Clear Topcoat

MIROCAT PC 3220 Clear Topcoat

#### **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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Issue Date: 4 October 2019

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