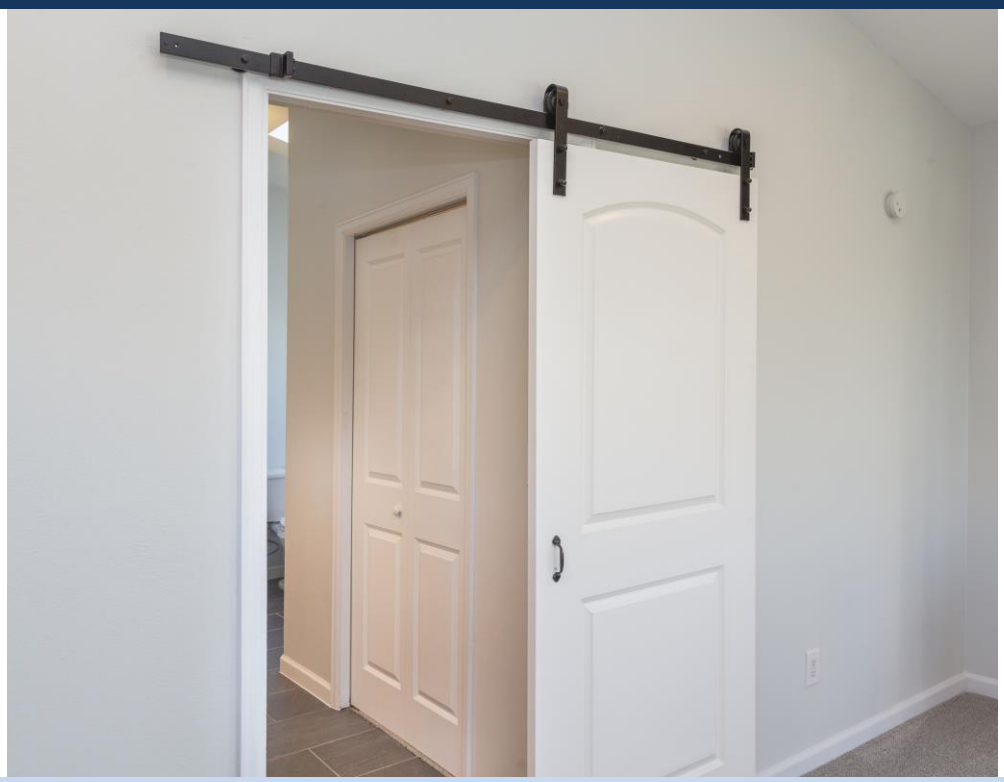
MIROTONE



MIROLAC NC

Pigmented Coatings

Product Information Guide

Innovative Coating Solutions

General Description

Mirotone's range of pigmented nitrocellulose 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
- Undercoats are easy to sand and powder easily, reducing sanding time
- Excellent flow and levelling results in a smooth level finish
- Formaldehyde free, safer for the applicator, zero formaldehyde emissions in rooms in which articles are installed
- Topcoat is available in a range of gloss levels and colours

Recommended Use

Interior use only. Ideal for domestic furniture, internal doors, children's toys and furniture, picture frames, musical instruments, MDF building products, peg boards for display areas and built in wardrobes.

When top coated with MIROBILD AC topcoats or MIROTHANE PU topcoats MIROLAC NC 3121 & 3125 undercoats may be used on kitchen cabinets and commercial furniture.

Product Compliance

Children's Toys (Heavy Metal Content) – All MIROLAC NC 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.

KCMA / ANSI A1611.1: Performance and construction standard for kitchen and vanity cabinets – MIROLAC NC 3121 Universal Undercoat

MIROLAC NC 3121 Universal Undercoat when top coated with MIROTHANE PU 5650/30 Satin (1A:1B) with MIROTHANE PU 5747 Part B Hardener passes the following Kitchen Cabinet Manufacturers Association (KCMA) finish tests:

- Section 9.1: Shrinkage and Heat Resistance
- Section 9.2: Hot and Cold Check Resistance
- Section 9.3: Chemical Resistance
- Section 9.4: Detergent and Water Resistance

Fire Rating Compliance – MIROLAC NC 3121 Universal Undercoat

(AS/NZS 1530.3:1999 Method for fire tests on building materials, components and structures – simultaneous determination of ignitability, flame propagation, heat release and smoke release.)

MIROLAC NC 3121 Universal Undercoat has been tested by an accredited third party testing authority over 2mm MDF flat board as specified by clause 4.4.3 of AS/NZS 1530.3:1999.

Tests	Results
Ignitability Index (0-20)	**15**
The higher the figure, the quicker the sample ignites i.e. the more flammable	
Spread of Flame Index (0-10)	**7**

The higher the figure the faster the flame spreads	
Heat Evolved Index (0-10)	**4**
The higher the figure the more heat developed	
Smoke Developed Index (0-10)	**4**
The higher the figure the denser the smoke produced	

The coating complies with Building Code Specification C1.10 Fire Hazard Properties for Class 2-9 buildings; General Requirements. However, this product must not be used in public corridors, exit doors to fire-isolated stairways, passageways or ramps. Class 9a buildings (hospital, nursing home etc.) in a patient-care-area or Class 9b buildings (public hall, in the auditorium etc.) not protected by a sprinkler system.

Note: To comply with the Building Council of Australia, suppliers need to provide Fire Hazard Certificates / Test Reports for the products used. These certificates / test reports need to cover the whole product system i.e. substrate, coatings, adhesives etc. The test results above apply to the coating only and it is therefore the user's responsibility to have their complete system tested for compliance.

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).
Curtain Coating (3121 & 3125):	40-60 seconds viscosity with applied wet film thickness of 150 microns.
Electrostatic Spray:	Consult supplier's directions for correct voltage settings and earthing procedure.

Force Drying

Flash Off:	5-10 min at 20°C
Force Dry:	20-45 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 the 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.
- 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.

Undercoat: Apply one of the following undercoats per the instructions on the relevant data sheet:

- MIROLAC NC 3121 Universal Undercoat
- MIROLAC NC 3125 Universal White Undercoat
- MIROLAC NC 3130 White Undercoat

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:
MIROLAC NC 3150 Pigmented Topcoat

Over MIROLAC NC 3121 or 3125 Undercoats only
MIROBILD AC 3770 Acid Catalysed Topcoat
MIROTHANE PU 5650 Polyurethane Topcoat

Tinted Undercoat

To create your own tinted undercoat and minimise waste left over MIROLAC NC 3150 Topcoat can be added to MIROLAC NC 3130 Undercoat at an addition rate of 10 to 30%. See table below for details:

MIROLAC NC 3130	MIROLAC NC 3150/30 Satin Topcoat	Thinner Amount
70% = 700 mls	30% = 300 mls	5-20%

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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