

Trimatrix®

Powder Coating for Heat Sensitive Substrates

Product Code: 942 Line

Specifications Met: DIN 68861 (Furniture Surfaces)

Description

Trimatrix is a tough thermosetting powder coating designed for application on Medium Density Fibreboard (MDF) and other heat sensitive substrates. It is suitable for interior applications only.

Trimatrix shows good application properties on MDF and gives a film very resistant to wear and damage.

Features

Benefits

Good application on MDF	Single coat system for various uses on MDF
Very low temperature cure	Excellent for heat sensitive parts e.g. plastic inserts on cupboard doors
Film integrity	Long intact life of coating
Very good surface hardness	Hard wearing/serviceable finish
No solvents or emissions	Less waste and pollution to the environment
Good chemical resistance	Resists oil and general chemical spills

Uses

Trimatrix has a multitude of uses over medium density fibreboard (MDF).

Examples include: office fittings, work stations

Performance Guide

Weather	Trimatrix is not recommended for exterior use. Under glass the product has excellent resistance to yellowing and gloss change.	Cross Hatch Adhesion	No removal
Heat	Excellent resistance to 120°C	Cigarette Resistance	Slight marking
Acid	Resistant to spills of dilute acid.	Abrasion	Excellent resistance to abrasion.
Alkali	Resistant to spills of dilute alkali.	Pencil Hardness	Min H

Chemical Resistance

Very good resistance to oils and general chemicals.

Ethyl Acetate	Softens after prolonged contact	White Spirits	Resistant
Ethanol	Resistant	Xylene	Slight softening/limit contact
Methyl Ethyl Ketone	Softens after prolonged contact		

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Product Guide

Colour	Made -to-order colours available only.	Specific gravity	1.2 - 1.7 @ colour
Gloss Level	Usually available in a fine texture or a smooth matt grade	Shelf life	6 months when stored below 25°C/dry conditions

Application Data

Preheat Temperature	Using Trimatrix MDF the preheat stage may not be necessary. If preheating is required, the MDF substrate should be preheated to a surface temperature of between 60°C and 90°C before coating.
Application Method	Electrostatic spray.
Clean Up	Dust or vacuum loose powder. Avoid use of compressed air.
Curing	Discuss with Orica Camel Powder Coatings the cure methods for MDF. Faster cure can be achieved using Infra Red (IR) combined with convection.
Metal Cure Schedule	Curing down to 110°C is possible
Cured Film Thickness	Recommended: 130 µm Range: 100 – 200 µm

Note: The grade of MDF used is very important in achieving successful powder coating.

Trimatrix MDF grade (using Orica MDF board technology) is recommended in combination with 942 Trimatrix powder coating to give the best combination for successful coating of MDF.

The Trimatrix MDF board has excellent heat resistance (for dimensional stability of the MDF) and excellent and consistent transfer efficiency of 942 Trimatrix powder coating for successful powder coating.

Theoretical spreading rate at recommended film thickness

A coverage rate of 4 - 8m²/kg is typical. Practical spreading rates will vary due to such factors as method and conditions of application and surface profile and texture.

Application Guide

Surface Preparation

All MDF surfaces should be clean and free from dirt, oil or loose MDF fibres. Avoid touching the MDF board with bare hands (wear gloves)

Application Procedure and Equipment

1. If required, preheat the MDF to the temperature recommended above.
- 2a) For fluidised hoppers, ensure uniform fluidisation of powder. Fluidised powder should resemble “simmering liquid”. Aged or compacted powder may require pre-conditioning for several minutes to fluidise evenly.
- 2b) For box feeders, ensure probe is fully inserted in powder and operated as per manufacturer’s recommendations. Box feeders are not suitable for the application of pearlescent and metallic finishes
3. Apply by electrostatic spray.
4. Cure as per recommendations outlined above.
5. Test for cure of the coating by contact with a drop of Corsol PGMA (available from Orica Camel Powder Coatings) for 30 seconds. Surface should be wiped dry and immediately checked for softening. Only slight surface softening should occur.

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Care and Maintenance

To maintain the attractive appearance of the Trimatrix film, the surface can be washed with tepid water and mild liquid detergent, followed by a fresh water rinse. Remove all water from the surface

The use of abrasive cleaners is not recommended, nor is the use of active organic solvents.

Health and Safety

The MSDS is an integral part of using this product as it contains information on the potential health effect of exposure, personal protective equipment needed and other relevant SH&E information.

For detailed information, refer to product label and the current Chemical Data Sheet available through Sales and Customer Service Offices.

Phone: 86 769 8755 8778

Precautions and Limitations

- As a result of possible wide application variations and stoving conditions, Trimatrix may show variations between Orica Camel Powder Coatings prepared samples and production applied material. Therefore, it is the applicator and/or their customer's responsibility to ensure the product conforms to their requirements.
- For optimum film performance ensure the recommended dry film thickness is obtained.
- Not recommended for exterior applications.

Transport and Storage

Sizes:	20 kg boxes	Flashpoint:	N/A
Weight:	20 kg	UN:	N/A
Dangerous Goods Class:	N/A	Package Group:	N/A
Shipment Name:	Not dangerous goods. No special transport requirements.		

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