

TRUEMOLD – IM90

Technical Data Sheet

Description

TRUEMOLD – IM90 is an Inmold powder coating. It is based on advanced unsaturated polyester resin technology and high performance pigments designed specifically to improve the surface quality, durability and aesthetic appearance of SMC/BMC products

Characteristics

Durable
Hard
Anti-graffiti
Scratch resistance
Prevent fiber blooming
Salt and chemical resistant
Hygienic
All colours possible, including metallics

Applications

Specially developed for use on automotive, mass transport, electrical and electronic, building and construction, domestic appliances, sanitary

Product Properties

UV Resistance	Very good UV resistance.
Flow out	depending on the mold
Surface	depending on the mold
Specific gravity	1.2-1.7 gr/cm ³ (low with dark colours, high with light colours)
Shelf Life	2 months (< 15°C and < 50% RH)

Application Data

Application	Applied by corona guns sprayed onto the heated mould surface just prior to the moulding of SMC/BMC.
Curing	135°C to 180°C @ SMC/BMC molding time in minutes depending on application.
Film Thickness	100-150 µm (recommended)
Theoretical cons.	4.2-6.25 m ² /kg. Practical spreading rates will vary due to such factors as method and conditions of application, specific gravity, surface profile.

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Coating Properties

Test results shown below are based on in mold coated SMC/BMC with 120 μ applied powder coatings.

Scratch resistance	>2 N	(ISO 1518-1)
NaOH test pH:13	No trace @20 min	
HCL 37% test pH:0.5	No trace @120min	
MEK test	No trace @25 rubs	
Humidity Test	No change @1000hrs	(ISO 6270-2)

Application Guide

Surface Preparation

Mold surfaces should be degreased and cleaned for optimal performance.

Application Procedure and Equipment

TRUEMOLD – IM90 series powder coatings charging properties are optimized when powder is free-flowing and moisture-free. Aged or compacted powder may require preconditioning for several minutes to fluidise evenly.

If storage room temperature is lower than the application area, powder coatings, which are hygroscopic, should be acclimated in unopened containers prior to adding into the spray hopper. For optimum performance, It should be applied and stored at air-conditioning area. Storage temperatures should be kept below 15°C.

Powder should not be stored in hoppers for long periods of time. If moisture condensation occurs, fluidize powder to dry-out or replace moisture-laden powder with virgin powder.

Powder coatings are finely ground particulates. Respirators or dust masks should be used by workers exposed to powder in order to avoid dust inhalation.

Compressed air to the gun must be oil and moisture free.

Silicone should not be used in application area.

For box feeders, ensure probe is fully inserted in powder and operated as per manufacturer's recommendations.

Contact points should be maintained to ensure metal-to-metal ground.

Apply by electrostatic spray. Relative humidity should be 50-60% for corona system.

Cure as per recommendations outlined above.

Sieving powder before adding to hopper eliminates potential clumping or foreign matter.

Care and Maintenance

TRUEMOLD – IM90 should be regularly washed with warm water and mild liquid detergent, followed by a fresh water rinse to maintain the attractive appearance of the powder cured film.

Health and Safety

The SDS is an integral part of using this product as it contains information on the potential health effect of exposure, personal protective equipment needed. It is recommended to contact to Sales and Customer Service Offices for further information.

Precautions and Limitations

As a result of possible wide application variations and molding conditions, **TRUEMOLD – IM90** may show variation, between İBA Kimya 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 performance ensures recommended dry film thickness is obtained.

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Transport and Storage

Packaging	15-20-25 kgs. Heavy polyethylene bag in a corrugated carton
Shipment	Not dangerous goods. Cold chain transport required.
Storage Conditions	Storage temperatures should be kept below 15 C° and 50% relative humidity. Powder should be stored in closed containers.

DISCLAIMER: All the information provided in this data sheet depends on our knowledge and experience up to date and may be subject to revision as new technology and experience evolve. Since the conditions of application may vary depending on the substrate, physical conditions and other variables, users should conduct necessary tests to determine the conformity of the product for its intended use. We do not accept liability since the application, use and processing of the products take place beyond our control and supervision. Moreover, our liability for breach of warranty is exclusively limited to replacement of the product or refund of its price and we are not liable for incidental, indirect or consequential damages under any circumstances.