İBA KİMYA SAN. ve TİC. A.Ş.
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IBABUSBAR – EE70

Technical Data Sheet

Description

IBABUSBAR – EE70 is a very fast curing, thermosetting powder coating based on especially selected epoxy resins and hardeners and formulated in order to meet the requirements of electrical insulation for busbar.

Characteristics

Especially green, grey, red, blue, yellow
High breakdown voltage
Suitable for electrical insulation
One coat finishes
Less waste and pollution to the environment
Suitable hot melt adhesives with optimal adhesion
Exceptionally fast cure
Low energy requirement for application
Exceptionally tough film
Excellent corrosion resistance

Applications

Electric motor cores
Low and high voltage busbar
Hermetic connectors
Watt-hour meter coils

Product Properties

UV Resistance	Not recommended for exterior use.
Flow out	Very good
Surface	Gloss GL – Semigloss HR
Specific gravity	1.4 – 1.6 gr/cm^3 (low with dark colours, high with light colours)
Shelf Life	6 months (< 30°C and < 50% RH)

Application Data

Application Corona (Can be applied by tribo guns if product code has "T" for the 6th character)

Curing **IBABUSBAR – EE70** series are being applied on preheated substrates (>160°C) and cure by residual heat

Metal Temperature (°C)	Time (minutes)	
150	10	(for quality control test)

Film Thickness 300-600µ (recommended)

Theoretical cons. 2-3 m^2/kg. Practical spreading rates will vary due to such factors as method and conditions of application, specific gravity, surface profile and texture.

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Coating Properties

Test results shown below are based on 0.5 mm steel with 60µ applied powder coatings.

Direct Impact	200 kgcm	(ISO 6272-2)
Reverse Impact	200 kgcm	(ISO 6272-2)
Buchholz Hardness	110	(ISO 2815)
Cross Hatch Adhesion	Gt:0	(ISO 2409)
Breakdown voltage	>30 V/µm	
Weight loss 12 hrs 250 °C	< %2.0	
Bending test 90° 300µm	no cracking	
Boiling water test	no change after 2 hours	
Abrasion resistance	< 0.10 gr	

Application Guide

Surface Preparation
IBABUSBAR – EE70 series is applied on to preheated copper and aluminium substrates.
Preheat Temperature > 160°C

Application Procedure and Equipment
IBABUSBAR – EE70 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 30°C.
Since **IBABUSBAR – EE70** is highly reactive, it is strongly recommended not to exceed 30°C storage temperature.
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, lower than 40% for tribo system.
IBABUSBAR – EE70 is applied to substrates preheated to higher than 160°C.
Reclaim-to-virgin ratios should be carefully monitored to maintain spray consistency.
Sieving powder before adding to hopper eliminates potential clumping or foreign matter.
Test for cure of the coating by impact test.

Care and Maintenance

IBABUSBAR – EE70 is a chemically resistant, hard wearing coating, most often used in areas where aesthetics are not important. Unlike common decorative coatings, no formal cleaning program is required.

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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 stoving conditions, **IBABUSBAR – EE70** 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 insulation performance ensures recommended dry film thickness is obtained.
Not recommended for exterior applications.
Overcuring may cause adhesion problems between layers. For proper adhesion between layers please read "Application Procedure and Equipment" section above.

Transport and Storage

Packaging	15-20 kgs. Heavy polyethylene bag in a corrugated carton
Shipment	Not dangerous goods. No special transport requirements.
Storage Conditions	Storage temperatures should be kept below 30°C and 50% relative humidity. Powder should be stored in closed containers. Since **IBABUSBAR – EE70** is highly reactive, it is strongly recommended not to exceed 30°C storage temperature.