

Technical Information

Wire Enamels I Microtherm 35 DC



MICROTHERM 35 DC

MICROMID ...+ MICROTHERM.. UL RECOGNISED FILE NO. E253451

Type

MICROTHERM 35 DC is new generation wire enamel based on Polyamideimide. When used as a Solo Coat / Base coat, it conforms to the specification requirements of IEC 60317 - 26. It is mainly used as top coat over Polyester imide based wire enamel like MICROMID 39, producing dual coated wires conforming to IEC60317 - 13. It has excellent Thermal; Mechanical & Electrical properties coupled with excellent windability & refrigerant resistance. MICROTHERM 35 DC wire enamel is not compatible with other conventional base coat enamels containing solvents such as MP Cresol, Solvent Naphtha etc. It is also available in different solids version.

Specifications

Properties	Test Method	Unit	Specification
Specific Gravity at 25°C	ASTM D 891		1.07 + / - 0.02
Viscosity			
By Ford Cup B4 at 30°C	IS 3944	Seconds	220 + / - 10
By Brookfield at 25°C	ASTM D - 2196	M pas	900 - 1200
Solid Content (1gm / 2hrs / 180°C)	ASTM D - 1353	Percentage	35 ± 1
Flash Point	ASTM D - 93	Degree in Celsius	>37°C

Recommended Thinner - for thinning the enamel a special THINNER is recommended.

Application - By Dies or Felt Pads.

Shelf Life - About 9 months from the date of production, if stored in original sealed containers in a cool & dry place.

Packing - 210 kgs / 25 kgs in MS New barrels / drums.

Representative properties of enameled wire as per IEC - 60851 part 1 to 6 & IEC - 60317 - 26 & 60317 - 13

Properties	Unit	Specification	
		MICROTHERM 35 DC	MICROMID 39 + PAI
		Single Coat	Dual Coat
		IEC 60317 - 26	IEC 60317 - 13
Conductor Diameter	Millimeter	1.00	1.00
Increase in Diameter	Millimeter	0.076	0.076
Colour		Brownish	Brownish
Mechanical Tests			
Jerk Test		OK	OK
Peel Test	Revolution	90	127
Elongation	Percentage	38	38
Flexibility		1xd - OK	1xd - OK
Resistance to Abrasion	Unidirectional - Newton	13.5	13.3

Thermal Tests			
Heat Shock at 280°C		2.24 mm - OK	—
Heat Shock at 250°C		—	2.24 mm - OK
Cut Through	Degree in Celsius	350 - OK	350 - OK
Thermal Class	Degree in Celsius	200	200
Electrical Tests			
Breakdown Voltage	Kilovolt (KV)	10	10
Tandelta Bending Point	Degree in Celsius	240	187
Chemical Test			
Solvent Resistance	Pencil Hardness (H)	3H	4H
Freon R22 Blister Test		No Blisters	No Blisters
Freon R22 Extraction	Percentage	Less than 0.100	Less than 0.100

Note - All technical properties are for guidance only. Our data reflect the latest of our knowledge and are based on the characteristics established in the laboratory and on practice experience. No warranties of any kind, either expressed or implied, are made regarding the products here described.