

Melting Resins

For high performance



Optimal protection for extreme demands

BECTRON® MR 34.. series is a set of thick film coating melting resins developed for rapid and simple protection of electronics. The material is based on modified polyolefin and is solvent-free with zero VOC. Polyolefin resins offer better moisture resistance and adhesion than standard hot melt materials based on polyamide chemistry.

BECTRON® MR 34.. series forms a soft and flexible encapsulation, operating over the temperature range -40 °C to 145 °C.

The electrical insulation properties are excellent with very good adhesion to many substrates. Strong chemical resistance protects against acids, alkalis and polar solvents and also fungal growth, but not to aliphatic and aromatic and chlorinated hydrocarbons.

Application of thermoplastic resins is particularly easy with a melting resin applicator, heated dispensing or monofilament system. With the monofilament system it is possible to reach thickness of approx. 200–400 µm. The removal of melting resin for repair or re-work is also very simple. Above the respective melting temperature, the melting resin is ready to use. On cooling to +105 °C it hardens to a solid. BECTRON® MR resins are ideally suited for high volume production lines with very short process time. Due to their low polarity, BECTRON® MR 34.. products have excellent electrical insulation properties. This is particularly advantageous in high humidity environment and at higher frequencies (MHz to GHz range).

Melt viscosities in the range 520 mPas to 9,250 mPas are available to suit more requirements.

BECTRON® MR34.. series has very good electrical properties particularly suitable for a wide range of electronic elements. It provides protection against moisture, corrosion, vibration and migration. BECTRON® MR is used very successfully in many different applications, from securing of individual components to the protection of hybrids and whole assemblies.

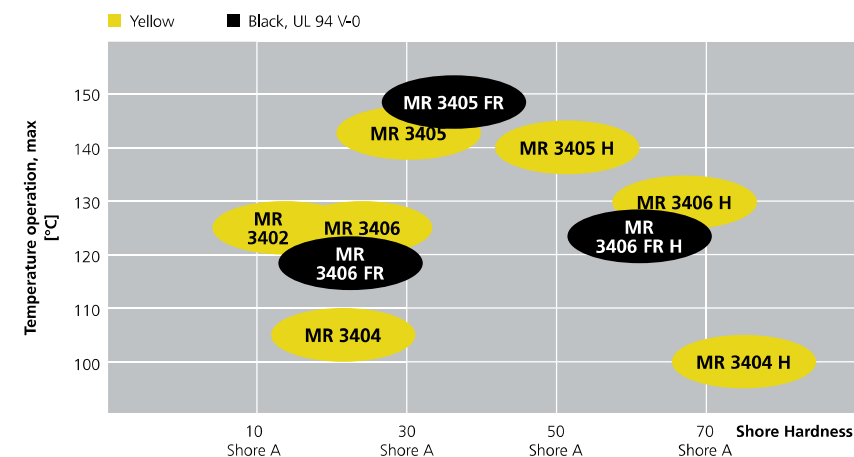
Melting Resins for high performance

BECTRON® MR 34 series is a one-component melting resin thick film coating, developed for electronic application. It is based on polyolefin resin chemistry, which is better suited to electronics than conventional polyamide based hot-melt thermoplastic:

- One component / "Ready to use"
- Zero VOC / 100 % solids
- Environmentally friendly / non-hazardous classification
- Ideal dielectric properties for electronic applications, i.e. at high frequencies
- Very low water absorption, excellent protection against humidity
- Very good adhesion on PCB's
- Possible to reach thick film thicknesses of 200 µm to 400 µm as well as for potting applications
- Repairable/recycling possible

BECTRON® MR series (Polyolefine, Thick-Film, Melting Resin, Potting)

Product	Recommended Application conditions	Color	UL 94	Max. operation temperature [°C]	Hardness [Shore A]	Softening point [°C]
BECTRON® MR 3402	9250 mPa·s @ 190 °C	Yellow	–	125	15	130
BECTRON® MR 3404	1100 mPa·s @ 180 °C	Yellow	–	105	22	107
BECTRON® MR 3404 H	2000 mPa·s @ 170 °C	Yellow	–	100	75	105
BECTRON® MR 3405	2100 mPa·s @ 190 °C	Yellow	–	145	30	155
BECTRON® MR 3405 H	2000 mPa·s @ 190 °C	Yellow	–	140	53	153
BECTRON® MR 3405 FR	2000 mPa·s @ 200 °C	Black	V-0	145	35	156
BECTRON® MR 3406	520 mPa·s @ 180 °C	Yellow	–	125	15	138
BECTRON® MR 3406 FR	800 mPa·s @ 190 °C	Black	V-0	125	16	139
BECTRON® MR 3406 H	2000 mPa·s @ 180 °C	Yellow	–	125	65	136
BECTRON® MR 3406 FR H	2500 mPa·s @ 190 °C	Black	V-0	125	63	136



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