

Metocene RM 2231 resin

Improved clarity and stiffness for blow molding applications



By courtesy of Milliken

Metocene RM 2231 offers improved performance in optics, aesthetics and processability

A member of the specialty resins family produced using proprietary single-site catalysts, *Metocene RM 2231* offers high-performance for customers that produce extrusion blow molding (EBM) applications.

The high clarity resin combines specific attributes of propylene copolymers, such as thermal and impact resistance. With excellent transparency, a melt flow rate of 3.5 g/10 min, and superior melt stability, this new product opens the door to the production of EBM applications with intricate design requirements, such as bottle handles.

Metocene RM 2231 is a new-generation material that can be considered for use in polypropylene random copolymer applications that require improved clarity and gloss characteristics. Compared to conventional materials, the new *Metocene* grade also provides improved surface characteristics in non-transparent applications using aesthetic pigments.

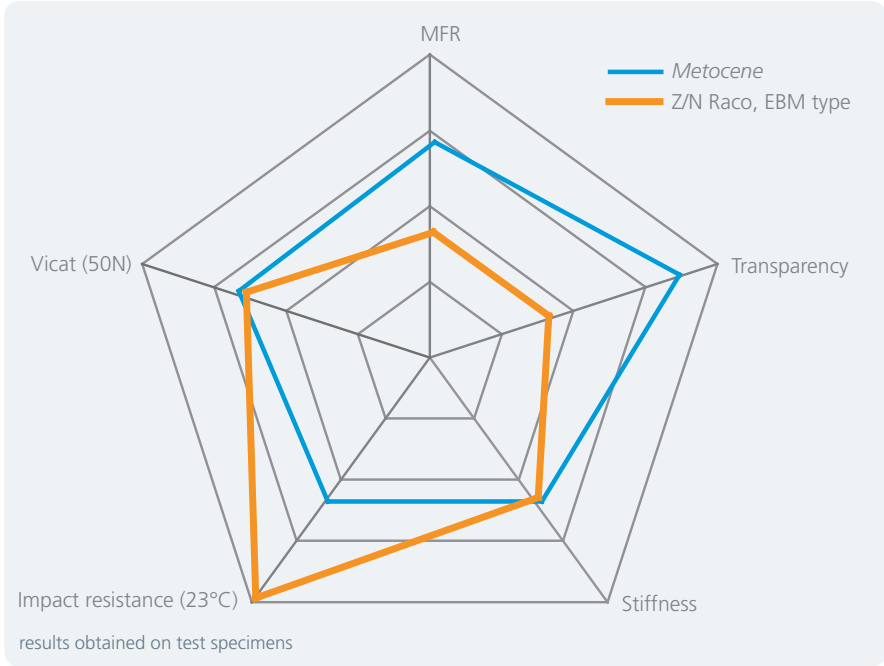
Metocene RM 2231 can be considered for use in the replacement of amorphous transparent polymers such as PET used in injection blow molded (IBM) applications. The new resin offers significant density advantages that can translate into weight savings. Compared to PET, cost savings in tool investments are possible.

Metocene RM 2231 does not require pre-drying or the high processing temperatures associated with other resins such as PET, which helps save time and energy, as well as improving the overall economics of the process.

The use of proprietary single-site catalysts to produce the resin translates into products with excellent aesthetics, surface gloss and purity. This high purity enhances the resin's resistance to discoloration; it also helps to improve product economics with regrind material when used with polyamides or EVOH in multilayer barrier bottles and film.

Potential Customer Applications

- Personal care bottles
- Detergent containers
- Food packaging
- Sheet extrusion
- Thermoforming
- Multilayer packaging



Metocene RM 2231 resin properties

Density (g/cm ³) ISO 1183	0.9
MFR (g/10 min, 230°C/2.16 kg) ISO 1133	3.5
Tensile modulus(Mpa) ISO 527-1-2	1050
Notched Izod (Kj/m2, 23°C) ISO 180	12.5
Haze 1 mm %	4

Before using a LyondellBasell product, customers and other users should make their own independent determination that the product is suitable for the intended use. They should also ensure that they can use the LyondellBasell product safely and legally. (Material Safety Data Sheets are available from LyondellBasell at www.lyondellbasell.com) This document does not constitute a warranty, express or implied, including a warranty of merchantability or fitness for a particular purpose. No one is authorized to make such warranties or assume any liabilities on behalf of LyondellBasell except in writing signed by an authorized LyondellBasell employee. Unless otherwise agreed in writing, the exclusive remedy for all claims is replacement of the product or refund of the purchase price at LyondellBasell's option, and in no event shall LyondellBasell be liable for special, consequential, punitive, or exemplary damages.