



**TOTAL**

COMMITTED TO BETTER ENERGY



# PP CAPS & CLOSURES

The choice is yours

# A SOLUTION FOR EVERY DESIGN

## In line with market requirements

Total Polypropylene product range is preferred and referenced within most of converters and brand owners looking for **differentiation and excellent processing**.

## Complete product range

We offer a complete product range **from low to high fluidities** while improving processing, mechanical properties and **allowing costs reductions** thanks to lightweighting and processing savings possibilities.

## Random Polypropylene

Grade	MFI (2.16 Kg – 230°C) (g/10min)	Flexural Modulus (MPa)	Izod Notched (at 23°C KJ/m <sup>2</sup> )	Specific Features
PPR 7227	10	1200	5.5	Certified organo, clarified
PPR 9220	20	900	6.5	Clarified
PPR 10232	40	1150	5.0	Clarified & antistatic
PPR 12232	80	1150	5.0	




## TOTAL PPR 7227 – an answer to sport drinks market

(\*): **Total PPR 7227** is offered with a full control of organoleptic properties for each batch. Certificates of compliance are available upon request.

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## Homopolymer Polypropylene



Grade	MFI (2.16 Kg – 230°C) (g/10min)	Flexural Modulus (MPa)	Izod Notched (at 23°C KJ/m <sup>2</sup> )	Specific Features
PPH 7062	12	1450	3.5	Antistatic
PPH 9081	25	1250	3.5	
PPH 9040	25	1900	4.0	Nucleated
PPH 10012	42	1500	3.0	Nucleated & antistatic
PPH 11012	55	1150	5.0	

**TOTAL PPH 9040 & PPH 11012 – reaching optimized performances**

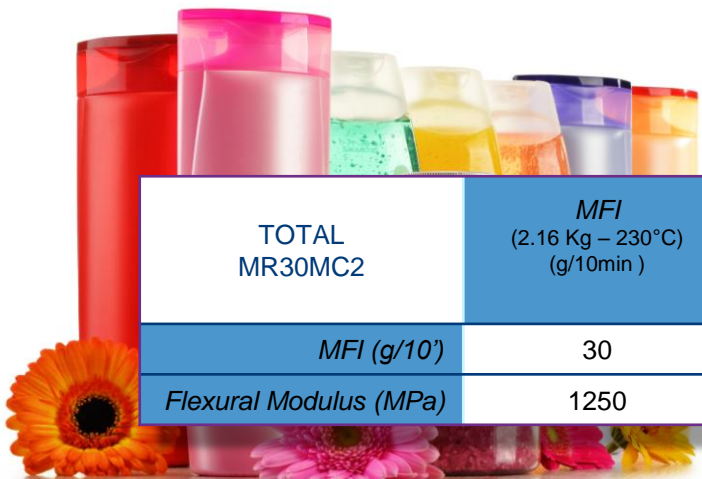
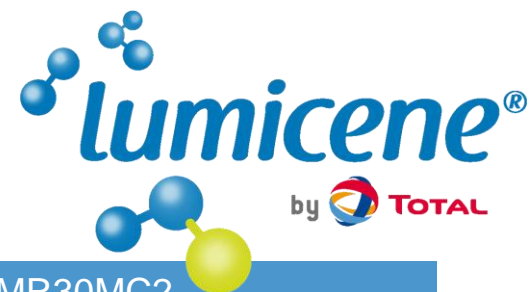
## Impact copolymer Polypropylene



Grade	MFI (2.16 Kg – 230°C) (g/10min)	Flexural Modulus (MPa)	Izod Notched (at 23°C KJ/m <sup>2</sup> )	Specific Features
PPC 7642	16	1500	8.0	Nucleated & antistatic
PPC 9642	26	1500	8.0	
PPC 10642	44	1500	7.5	
PPC 12712	70	1200	7.0	

**TOTAL PPC 12712 – a reference on the market for flip-top caps**

# BENEFITS OF LUMICENE® TECHNOLOGY



TOTAL MR30MC2	MFI (2.16 Kg – 230°C) (g/10min)
MFI (g/10')	30
Flexural Modulus (MPa)	1250

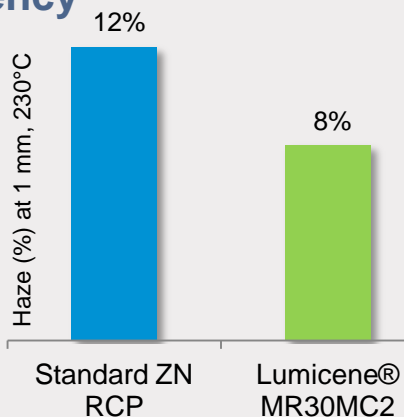
## TOTAL MR30MC2

Based on proprietary **Metalocene technology**, TOTAL MR30MC2, a Random Polypropylene combines improved properties while allowing significant processing costs reductions;

- Best in class organoleptics properties
- Improved dimensional stability
- Improved impact and stiffness balance

## TOTAL MR30MC2 – Better transparency & gloss than conventional PP Unavoidable in Personal Care applications

### Transparency



### Gloss

