

# Polyethylene product range

Total Polyethylene product range combines flexibility and easy processing for the injection of caps & closures, soft lids and pull rings.

Total Polyethylene HD 6081 specially designed for still drinks	
	HD 6081
Melt flow rate	8
Density (g/cm³)	0.960
Key features	Easy processing & improved ESCR Certified organo <sup>4</sup>



Total Polyethylene HD 6081 combines a unique molecular design and technology expertise in order to achieve excellent processing behavior and mechanical properties while providing significant processing costs savings<sup>5</sup>.

<sup>(4)</sup> Each batch is offered with a full control of organoleptics properties. Certificates of compliance are available upon request.  
<sup>(5)</sup> Study performed using full electric industrial machine, 48 & 72 cavities mould, moulded bridges, 1.8 g still water cap, versus market reference. ESCR tests performed under internal method using 0.5 bar, 10% Igepal at 40°C.

5 to 15%  
processing pressure  
decrease

40°C  
processing  
temperature  
reduction

Improved  
ESCR (more  
than 2 times  
the market  
reference)

Certified  
organoleptics  
properties



Total Low Density Polyethylene product range		
	1070 MN 18 C	1200 MN 18 C
Melt flow rate	7.5	22
Density (g/cm³)	0.918	0.918
Key features	Easy processing Suitable for soft lids, pull-rings and caps & closures	Easy processing Suitable for soft lids, pull-rings and caps & closures



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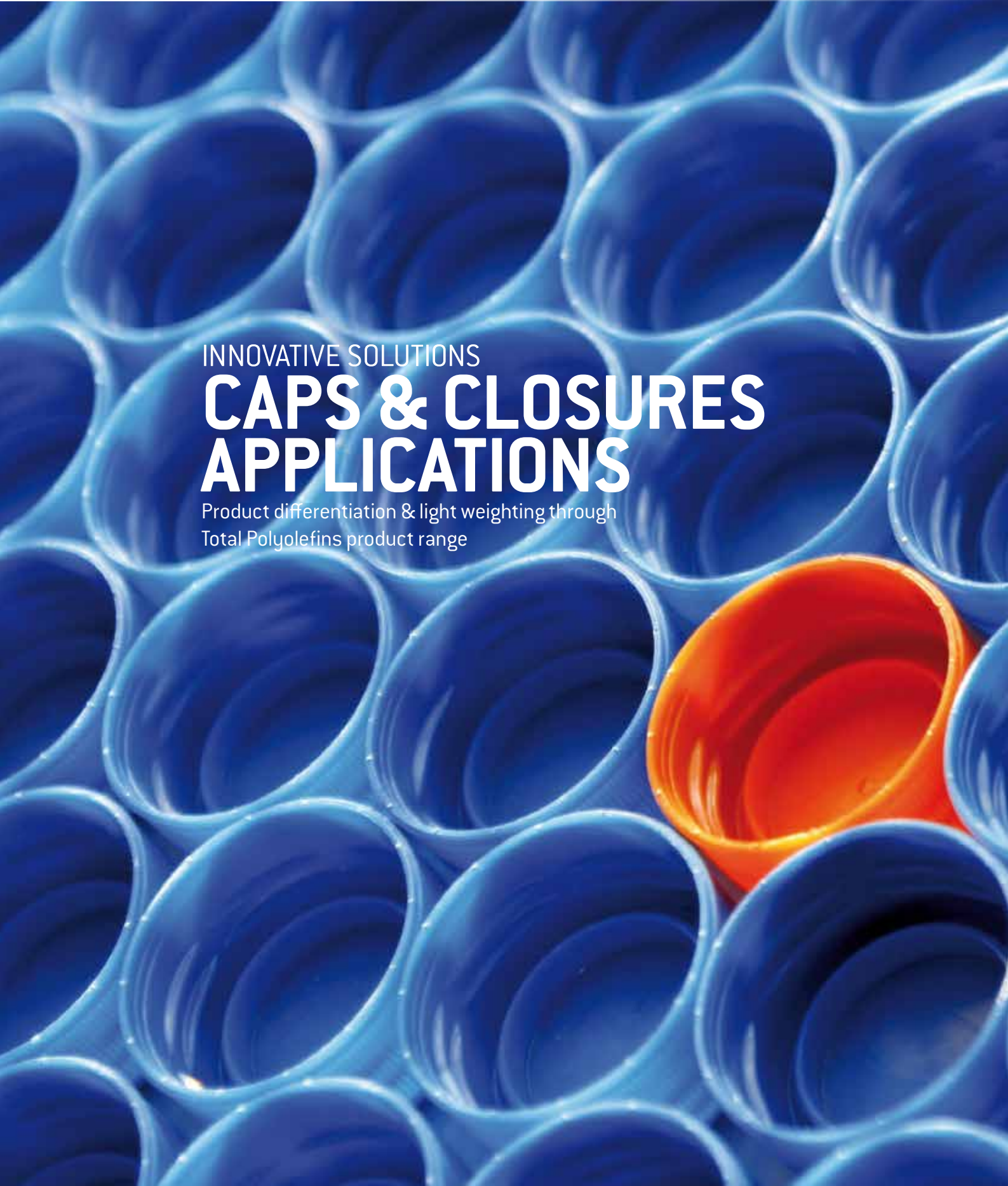
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INNOVATIVE SOLUTIONS  
**CAPS & CLOSURES  
APPLICATIONS**  
Product differentiation & light weighting through  
Total Polyolefins product range





Polypropylene product range

Total Polypropylene products range are preferred and referenced within most of converters and brand owners looking for differentiation and excellent processing.




**RANDOM POLYPROPYLENE product range**

	PPR 7227	PPR 9220	PPR 10232	PPR 12232
Melt flow rate	10	20	40	80
Key features	Certified organo <sup>1</sup> Clarified & Antistatic	Clarified	Clarified & Antistatic	Clarified & Antistatic

Total PPR 7227, first grade on the market certified “organo”. An answer to sport drinks market requirements.


[ 1 ] Total PPR 7227 is offered with a full control of organoleptics properties for each batch. Certificates of compliance are available upon request.



**HOMOPOLYMER POLYPROPYLENE product range**

	PPH 7062	PPH 9081	PPH 10012	PPH 11012
Melt flow rate	12	25	42	55
Key features	Antistatic	Improved mechanical properties	Improved living hinge and processability Nucleated & Antistatic	Improved living hinge and processability Nucleated & Antistatic

Total PPH 9081 & PPH 10012 developed to optimize mechanical properties and processability. An answer to convertor and brand owners requirements.



**IMPACT COPOLYMERS POLYPROPYLENE product range**

	PPC 7642	PPC 9642	PPC 10642	PPC 12642
Melt flow rate	16	26	44	70
Key features	Nucleated & Antistatic	Nucleated & Antistatic	Nucleated & Antistatic	Nucleated & Antistatic

Total PPC 7642 & PPC 9642, highly referenced for flip-top caps requiring high impact strength and stiffness for lightweighting possibilities. Improved fluidity available with PPC 10642 & PPC 12642.



TOTAL CAPS & CLOSURES POLYOLEFINS PRODUCT RANGE EVOLVING TOGETHER WITH NEW MARKET REQUIREMENTS

**A unique combination of product properties and technology**  
Complete product range from low to high fluidities while improving processing, mechanical properties and allowing costs reductions thanks to lightweighting and processing savings possibilities.

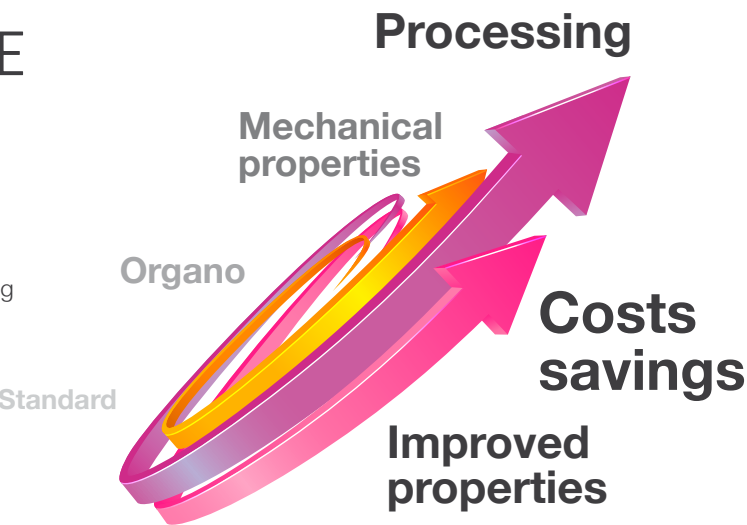
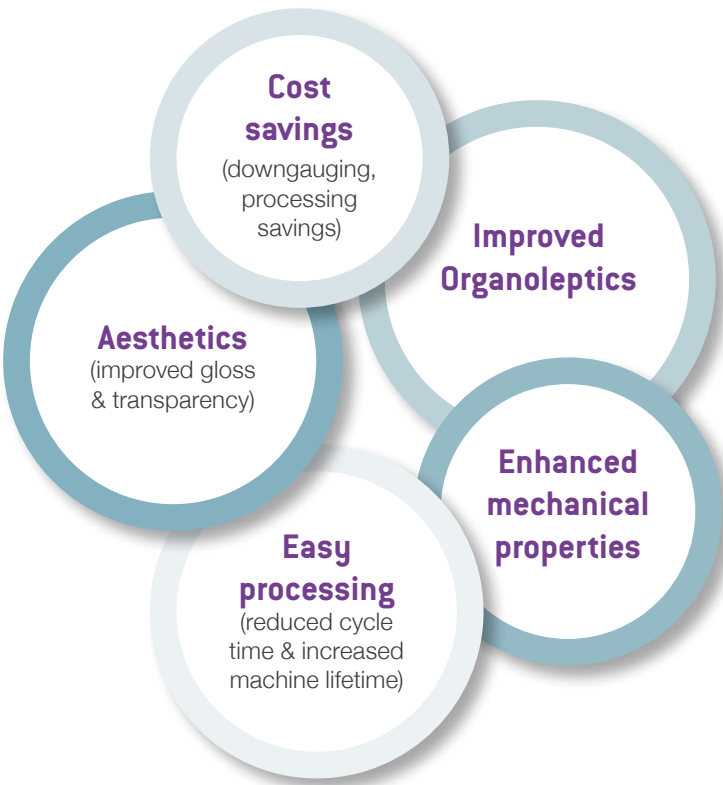


TOTAL POLYOLEFINS LUMICENE®, AN ANSWER TO CURRENT AND FUTURE CAPS & CLOSURES REQUIREMENTS

Based on proprietary Metallocene technology, Total Refining & Chemicals has unveiled a unique range of Polyolefins Lumicene® products. Polypropylene Lumicene® and Polyethylene Lumicene® combine improved properties while allowing significant processing costs reductions.

- Benefits of Total Lumicene® technology**

  - Best in class organoleptics properties
  - Improved dimensional stability
  - Outstanding mechanical properties (improved impact and stiffness balance for PP and improved ESCR for PE) allowing significant downgauging
  - Processing costs savings possibilities



Total Polypropylene Lumicene® product range				
	Lumicene® MR10MX0	Lumicene® MR30MC2	Lumicene® MR60MC2	Lumicene® MR110MC2
Melt flow rate	10	30	60	110
Key features	Outstanding transparency & gloss	High transparency & gloss Antistatic	High transparency & gloss Antistatic	High transparency & gloss Antistatic

Total Polypropylene Lumicene® MR30MC2, a new market reference in personal care applications.

Total Polyethylene Lumicene® product range		
	Lumicene® M 5220	Lumicene® M 5220 M
Melt flow rate	2	2
Density (g/cm³)	0.952	0.952
Key features	Bimodal design for easy processing Certified organo <sup>2</sup>	Bimodal design for easy processing Certified organo <sup>2</sup> Contains slip agent

Revolutionary product family range for carbonated drinks applications allowing significant improved product performance and important costs savings savings.

[ 2 ] Each batch is offered with a full control of organoleptics properties. Certificates of compliance are available upon request.



LUMICENE® M5220 FAMILY PERFORMANCES<sup>3</sup>



**20 to 45°C**  
decrease in processing temperatures

**15%**  
lower energy consumption

Excellent organoleptics performances

**10%**  
cycle time reduction

Improved ESCR (more than 2 times the market reference)

[ 3 ] Study performed using full electric industrial machine, 72 cavities mould (PCO 1881), 2.1 g cap, versus market reference. ESCR tests performed under internal method using 6 bars, 10% lgepal at 40°C.