



**TOTAL**

COMMITTED TO BETTER ENERGY



# STAND UP POUCHES

Flex cracking resistance & excellent organoleptics with Lumicene®

# STAND UP POUCHES



## Opportunities & challenges

Stand Up Pouch is a fast growing market: compared to traditional packaging, it can offer significant **advantages** in terms of **production, shipping and warehousing costs** while **reducing CO<sub>2</sub> emissions**. However it is a **challenging** packaging format to ensure **goods protection** and meet demanding **organoleptic requirements**.

## Lumicene® key benefits



Total's **answer** is its metallocene range: **Lumicene®** and **Lumicene Supertough®** offering excellent **organoleptic properties**, tailored sealing (temperature / force) and superior mechanical properties (including **flex crack resistance**, dart drop and tear resistance).

# CASE STUDY – HIGH PERFORMANCE POUCH FROM THIN FILM



- Easy to run on industrial machine
- High seal strength  
 $> 50 \text{ N}/15 \text{ mm}$
- Pass burst test  
 $> 1050 \text{ mbar}$
- Pass vacuum test  
 $> 30 \text{ s @ } 800 \text{ mbar}$
- Pass 2m drop test

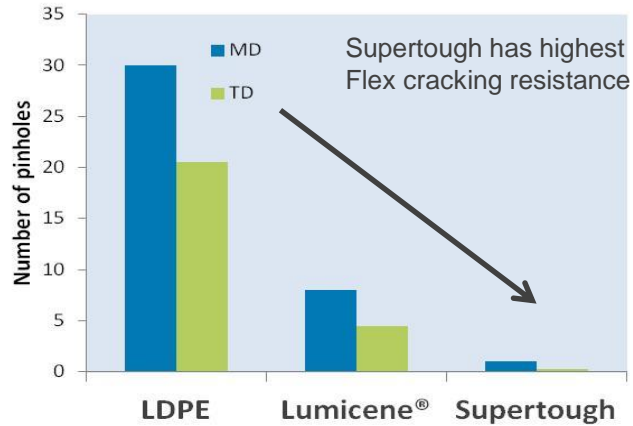
Function	Layer	Product	Thickness [ $\mu\text{m}$ ]
Lamination	E	LDPE FE8000	15
Downgauging	D	Lumicene <sup>®</sup> M4707EP	15
Downgauging & puncture	C	Supertough 32ST05	5
Stiffness & planarity	B	Lumicene <sup>®</sup> M4707EP	7,5
Sealing	A	Lumicene <sup>®</sup> M1810EP	7,5
			Total = 50 $\mu\text{m}$

- Lamination with 12  $\mu\text{m}$  PET
- Format 140x240x40 mm
- 5 mm seal width, round corners
- Standard sealing parameters

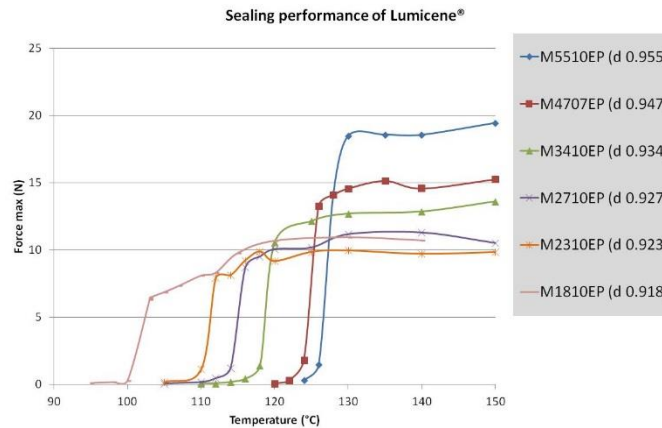
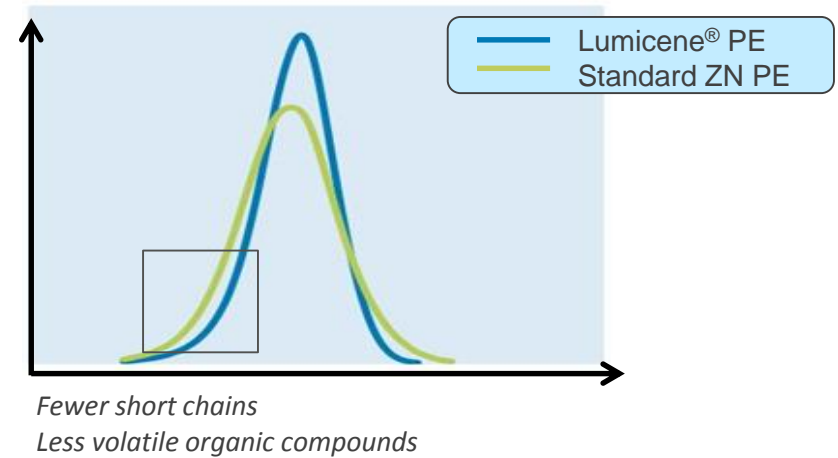


# WHAT TOTAL CAN OFFER

## High protection even when abused



## Excellent organoleptics – less VOC



## Tailored sealing properties