



TOTAL
COMMITTED TO BETTER ENERGY



GREENHOUSE FILMS

Processability and mechanical properties

GREENHOUSE FILMS



Opportunities & challenges

Requirements for greenhouses are more and more demanding: they need to **last longer**, offer better environments to grow more food in a shorter time and **lower waste**. Therefore it is important to be able to offer products helping you meet those demanding requirements by enabling **downgauging** and improving the **mechanical properties**.

What Total can offer



Thanks to the combination of our **Lumicene Supertough®** and our EVA, we provide to the market a global solution with a good downgauging potential. Our solution offers a film responding to the end-user expectations by using less products & reducing in the same time the footprint impact. With their **excellent processability** and **mechanical properties**, our Lumicene Supertough® are the ideal partners to simplify your film structures and facilitate your material sourcing.

GREENHOUSE FILMS

Requirements...

Depending on the culture type, localisation, weather etc...

Mechanics

- Strength and elongation
- Dart drop of flat or fold
- Creep

Optics

- Haze
- Light transmission

Thermicity

- IR absorption spectrum
- Keep warmth
- Protect from NIR

Ageing

- Long term UV-resistance
- Long-term pesticides resistance
- Resist for several seasons

...Total's answer

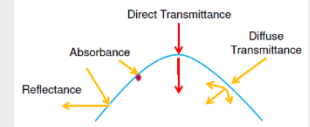
Mechanics & Optics

Improvement of optics & mechanics with **Total Lumicene® & Lumicene Supertough®**.



Thermicity

Our **EVA copolymers** can help you achieve the right thermicity



Processability

Total Lumicene Supertough® gives a better bubble stability, that allows you to run trouble free on lines with a high output.

