

Another step in the development of your business

*Repsol Resistex*<sup>®</sup>

Resistance. Performance. Results





# Adding extra resistance to your business

*Repsol takes another step  
in differentiating  
its solutions*

**Repsol Resistex<sup>®</sup>**

High resistance to tearing and puncture

Excellent transparency

Excellent gloss

Multiple applications for food packaging,  
industrial and agricultural film;  
and insulation for power cables

The information contained herein is based on REPSOL QUIMICA's current knowledge and experience and is presented in good faith for guidance only. Although REPSOL QUIMICA declares to have been most diligent when including the information contained herein, taking into account that several and different factors may affect the processing, application or use of the products, the convertor shall be responsible in every case for the conditions under which the products are transformed as well as for the final use given to them. REPSOL QUIMICA warns that this information may undergo variations or improvements; therefore REPSOL QUIMICA is not obliged to reflect these in this document or to communicate them to whomever may have access to it. Moreover, these readers should be aware that some or all of the products might be protected by intellectual property rights. © REPSOL QUIMICA, S.A. 2019. All rights reserved.





Repsol

Over **8** decades of experience  
in the world of energy

One of the largest energy companies worldwide  
and one of the biggest private oil & gas companies.

Repsol is committed to our customers' global strategy putting our entire organization at their disposal to achieve a common goal: to create long-term relationships which enable us to rise to the common challenges our business presents.



**Repsol Campus, Corporate Headquarters in Madrid**

LEED® Platinum certificate, awarded by the prestigious US Green Building Council (USGBC), for new buildings construction



Over **95** countries  
where we market our products

## Added value

Repsol's Chemicals Division, with a high degree of integration, focuses its strategy in the constant **generation of value** through **differentiated products and services**.



Over **1,500** references

Repsol manufactures a wide variety of products, ranging from base petrochemicals to derivatives.

**Base petrochemicals:** ethylene, propylene, butadiene and benzene.

**Intermediate products:** styrene, propylene oxide, polyether polyols, and propylene glycols.

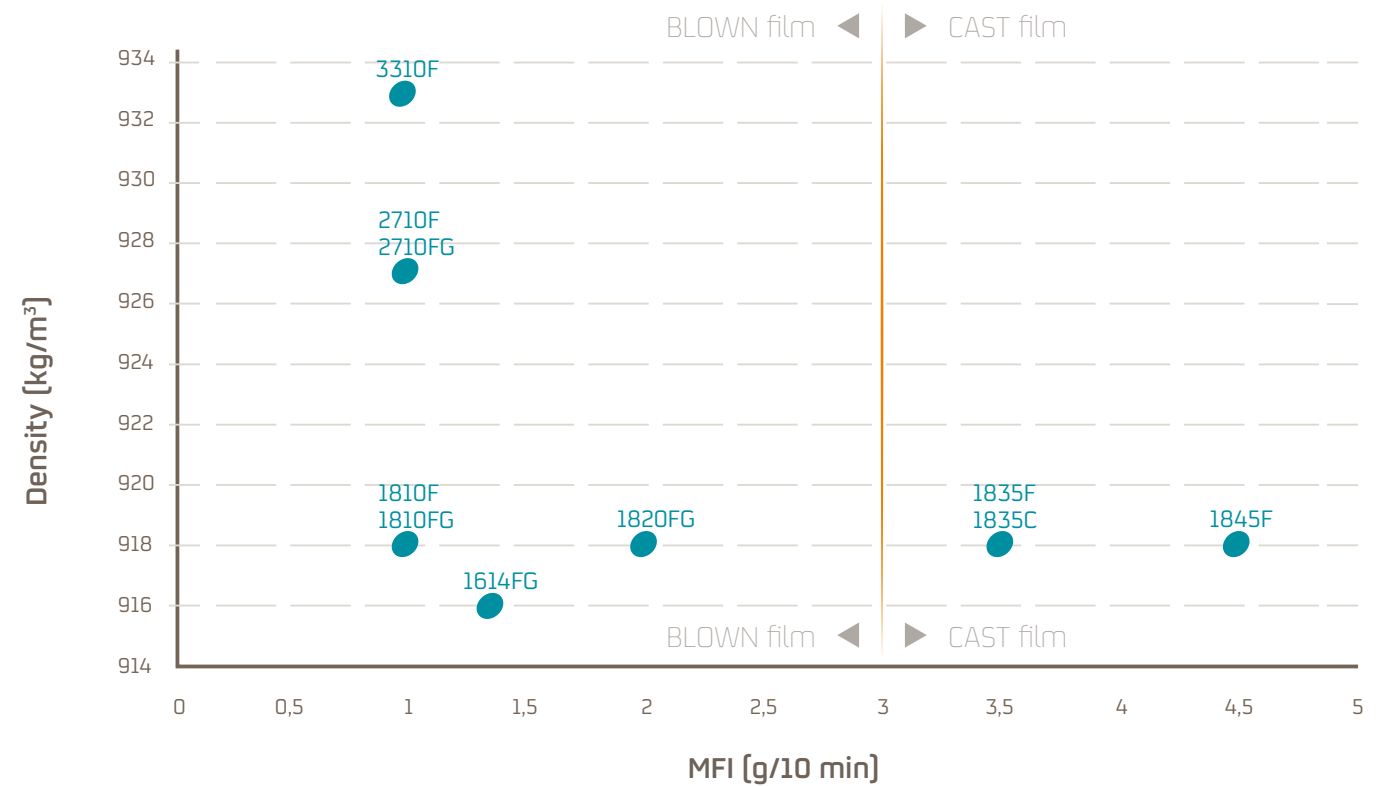
**Polyolefins:** polypropylene (PP) and PP compounds, both high and low-density polyethylene (HDPE and LDPE), **metallocene linear low density polyethylene (mLLDPE)**, ethylene vinyl acetate (EVA) and ethylene butyl acrylate (EBA) copolymers.

Over **100** scientists and researchers  
working for you

Repsol's commitment to R&D is an evidence of the company's aim to attain business excellence to meet future horizons.

# Metallocene linear low density polyethylene (mLLDPE)

Grade	MFI	Density	Process	Antiblock	Slip	Processing Aid	Antioxidant	Compliance	Industrial film		Food packaging	Agriculture film	Cables
									Blown film	Cast film			
	ISO 1133 g/10' 190°C; 2.16 kg	ISO 1183 Kg/m <sup>3</sup>		ppm	ppm			European regulation EU-10-2011 for food contact	Heavy duty packaging, stretch hood and shrink films	Stretch film	Multilayer packaging, laminated films, seal layer (FFS packaging), freezer films, bakery film	Silage, mulching film and greenhouses	Isolation for monosil process
<b>Repsol Resistex® 1810F</b>	1	918	Loop	-	-	●	●	●	●		●	●	
<b>Repsol Resistex® 1810FG</b>	1	918	Loop	2500	1000	●	●	●	●		●	●	
<b>Repsol Resistex® 2710F</b>	1	927	Loop	-	-	●	●	●	●		●	●	
<b>Repsol Resistex® 2710FG</b>	1	927	Loop	2500	1000	●	●	●	●		●	●	
<b>Repsol Resistex® 3310F</b>	1	933	Loop	-	-	●	●	●	●		●	●	
<b>Repsol Resistex® 1614FG</b>	1,4	916	Loop	2500	1000	●	●	●	●		●	●	
<b>Repsol Resistex® 1820FG</b>	2	918	Loop	2500	1000	●	●	●			●	●	
<b>Repsol Resistex® 1835F</b>	3,5	918	Loop	-	-		●	●		●			
<b>Repsol Resistex® 1835C</b>	3,5	918	Loop	-	-		●	●					●
<b>Repsol Resistex® 1845F</b>	4,5	918	Loop	-	-		●	●		●			



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# Food packaging film



## Transparency

Greater sharpness and gloss for your products.

## Seal strength

More reliable, secure seals.

## Processable co-extrusions

Combinable in multilayer films and in LDPE blends.

## Odourless and tasteless

Improves organoleptic properties thanks to a lower presence of catalytic residues and optimized formulation.

## Low temperature seal initiation

High production speed without deterioration.



### **Tear resistance**

Increased safety and performance.

### **Resistance to puncture**

Safer packaging preventing breakage.

### **Low temperature seal initiation**

Less packaging time and energy saving.

### **Downgauging**

Saving material while maintaining mechanical properties.

### **Impact resistance**

Greater protection and reliability.



### **Tear resistance**

High reliability and profitability.

### **Flexibility and resistance**

High elasticity and durability under adverse conditions.

### **Breaking strength**

High tenacity, safety and profitability.

### **Downgauging**

Cost savings and environmental sustainability.

### **High transparency**

Greater optimization of light and efficiency.



*Repsol offers grades of excellent properties specially designed for applications with strict quality requirements*

Excellence is intrinsic to Repsol's values. It infuses our daily work and helps guide our decisions and actions, contributing to achieve the commitment made to our customers, stakeholders, employees, suppliers / partners and society to build a better future.

### **Safety is our priority**

Petrochemical complexes, packaging facilities and logistics centres all have OHSAS 18001.2007 (Occupational Health and Safety Assessment Series) certification for their rigorous safety measures.

Technical Data Sheets and MSDS are available on: [www.repsol.com](http://www.repsol.com)



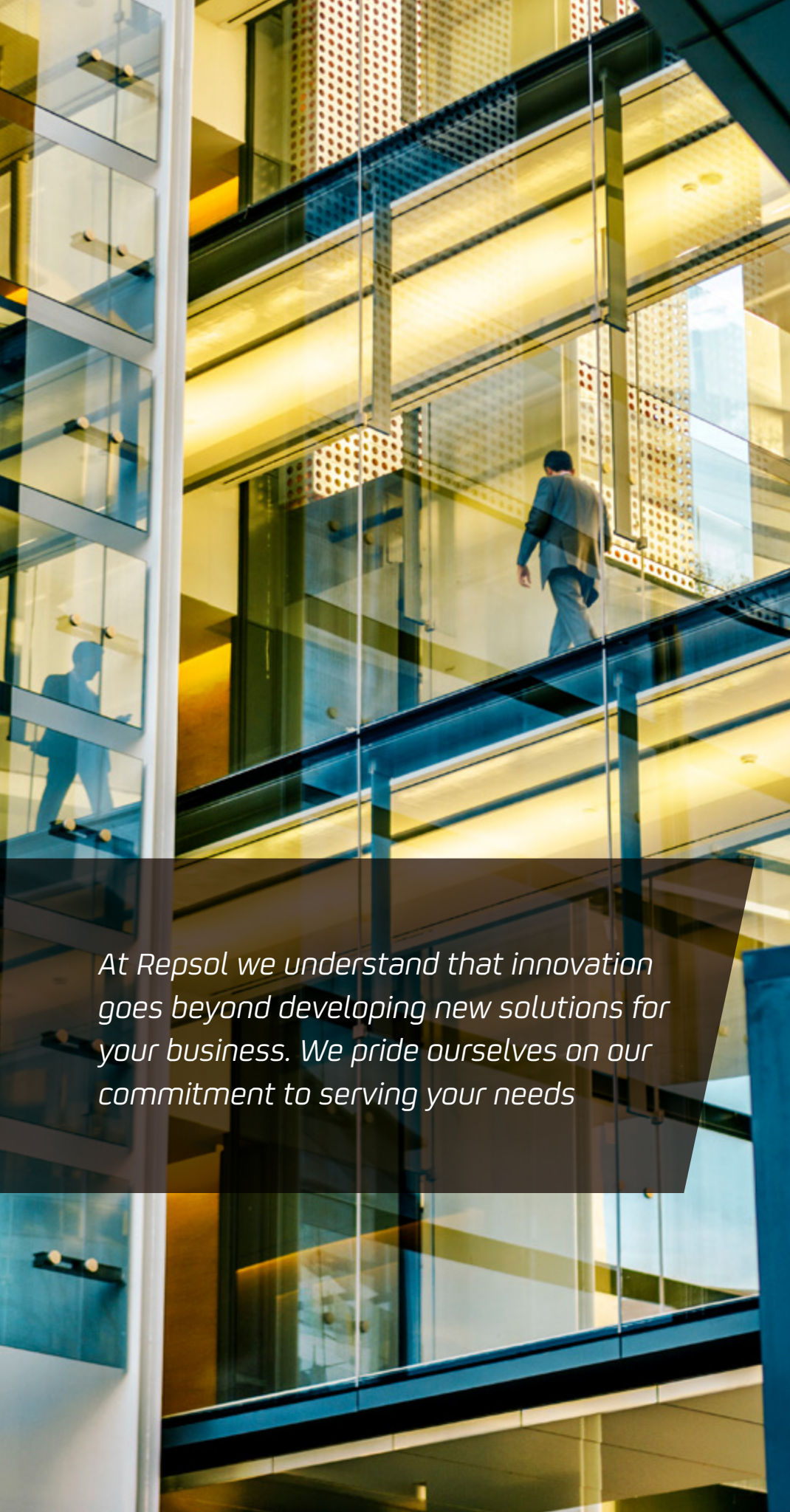
Petrochemical complexes, packaging facilities and logistics centres

**OHSAS 18001.2007**

All petrochemical plants

**FSSC 22000**





## Quality

All petrochemical plants are compliant with the current ISO 9001:2015 standards, for the quality of processes from manufacture to distribution, transport management and end product warehousing.

All petrochemical plants

**ISO 9001:2015**

## Environment

We set up and deploy ambitious energy efficiency programmes to reduce energy consumption and GHG emissions as one of the key elements of our strategy. These programmes pursue long term targets which have been made public in order to facilitate their progress by the stakeholders. In this sense, Repsol Química has attained a final reduction of 0.56 million tonnes of GHG emissions at the end of the 2006-2013 period. Repsol is currently working on a new target covering the period 2014-2020, that involves an additional reduction of 0.42 million tonnes of CO<sub>2</sub>. All petrochemical complexes, have ISO 14001 certification for their environmental management and the reduction of the impact of their facilities; and ISO 14064 for the annual verification of greenhouse gas (GHG) emissions. The Chemical area of our complexes in Tarragona (2015), Puertollano (2013) and Sines (2016), has implemented an Energy Management system according to the requirements indicated in the International Standard ISO 50001. This system is dedicated to developing and implementing our organization's energy policy, as well as manage the energy aspects of our activities, products or services. The objective is to increase and improve our energy efficiency, based on systems' implementation aimed at continuous energy performances improvement and thus contribute to a more efficient and sustainable use of energy. Repsol reinforced its commitment with sustainability by signing the "Paris Pledge for Action" document. An historical agreement in which both developed countries and less developed countries and companies engaged to contribute towards a low CO<sub>2</sub> emission economy.

Puertollano, Tarragona y Sines

**ISO 50001 / ISO 14001 / ISO 14064**

*At Repsol we understand that innovation goes beyond developing new solutions for your business. We pride ourselves on our commitment to serving your needs*



## Chemicals Customer Care

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*Transparency*  
*Flexibility* *Integrity*  
*Innovation* *Responsibility*