



Polyethylene and polypropylene

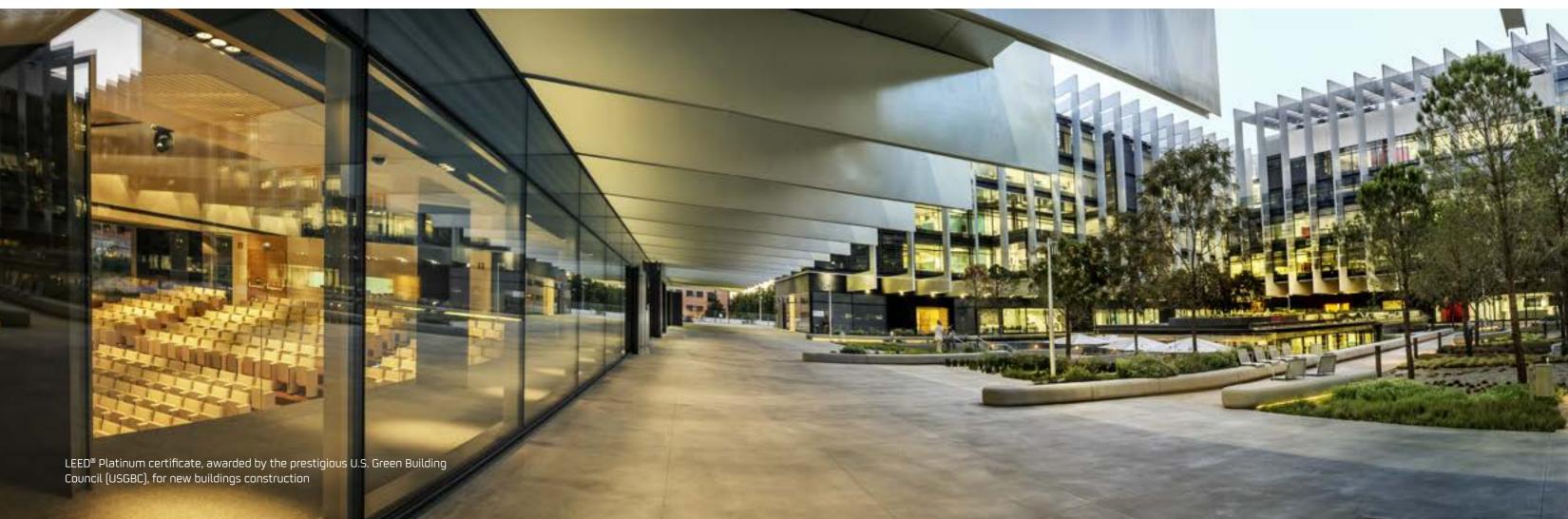


# Repsol. A global multi-energy company

## With over 8 decades of experience

It is leading the energy transition with its ambition of achieving zero net emissions by 2050.

Present throughout the energy value chain, the company employs 24,000 people worldwide and distributes its products in nearly 100 countries. Its customer-focused product and services portfolio meets all consumer needs of around 24 million customers, whether at home or on the move.



Chemicals

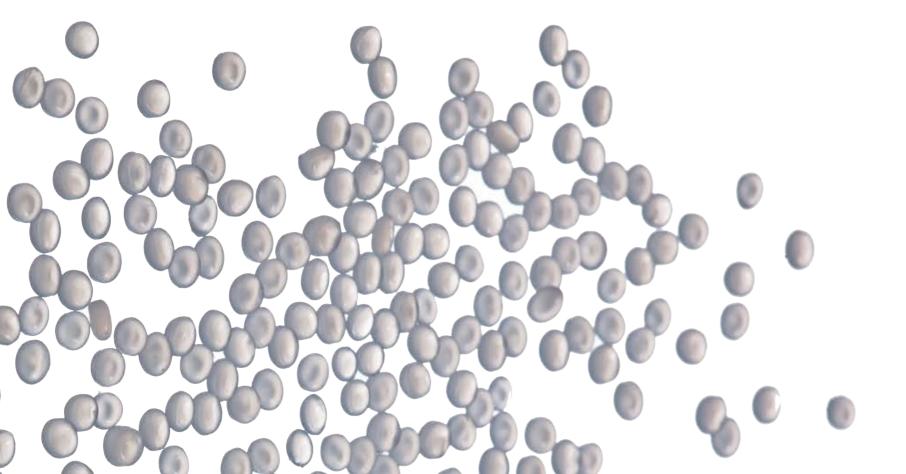
© REPSOL QUIMICA, S.A. 2021. All rights reserved

# Chemicals

## Over 95 Countries where we market our products

## Added value

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



## 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 evidence of the company's aim to attain business excellence to meet future horizons.





Working for a more sustainable future

## At Repsol, we believe in the circular economy, and we run specific projects that minimize the environmental impact of our materials. To this end, we are committed to making our industrial processes increasingly efficient and reducing the carbon footprint of our polymers.

We have a **specialized circular economy department** dedicated to recycling post-consumer materials to drive development of new materials offering solutions based on innovative polyolefins with recycled content.

We use **recycled plastics in critical applications**, creating new markets for plastic waste and driving circularity by giving that waste a new use. As a result, we offer a wide range of polyolefins with recycled content that deliver excellent engineering performance.

We have circular polyolefins obtained by incorporating pyrolysis oil, from chemically recycled plastic waste not suitable for mechanical recycling, together with virgin feedstock into our petrochemical process, reducing the consumption of non-renewable resources.

These circular polyolefins have the same properties and quality as virgin material and hold Food Contact Approval.

We have obtained ISCC PLUS certification for circular and traceable polyolefins that use plastic waste as raw material.

Moreover, our wide range of polyolefins is 100% recyclable.

Our ambition is to recycle the equivalent of 20% of the polyolefins we produce to support, in conjunction with the other initiatives in Repsol's circular economy strategy, the goal we announced in December 2019: to reach net zero emissions by 2050.

To contribute to the company's emissions neutrality goal, our chemicals business has launched its 3030 Plan, intended to cut our carbon intensity by 30% by 2030.

Advancing the circular economy and lowering carbon intensity in our chemicals business will contribute towards transforming Repsol's industrial operations, as well as **developing high-value-added raw materials, making it possible** to manufacture an infinite number of products that improve human well-being, safety, and quality of life while enhancing the environment.



Repsol Net Zero Emissions by 2050



## Polyethylene

## Repsol Alcudia

Grade	MFI	Density	Polydispersity	Applications
	<b>ISO 1133 g/10'</b> 190 °C 2,16kg	ISO 1183 kg/m³		
R4806HT	0.65	948	Narrow, very high tenacity.	– Blown film for stretched raff
R4805EP	0.55	948	Medium.	
M5206	0.60	952	Narrow, very high tenacity.	Monofilament for textile app
M5309	0.95	953	Medium tenacity, soft yarns.	



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. 2021. All rights reserved.

raffia. High speed textile lines raffia for nets, and ropes.

applications, nets, and ropes.

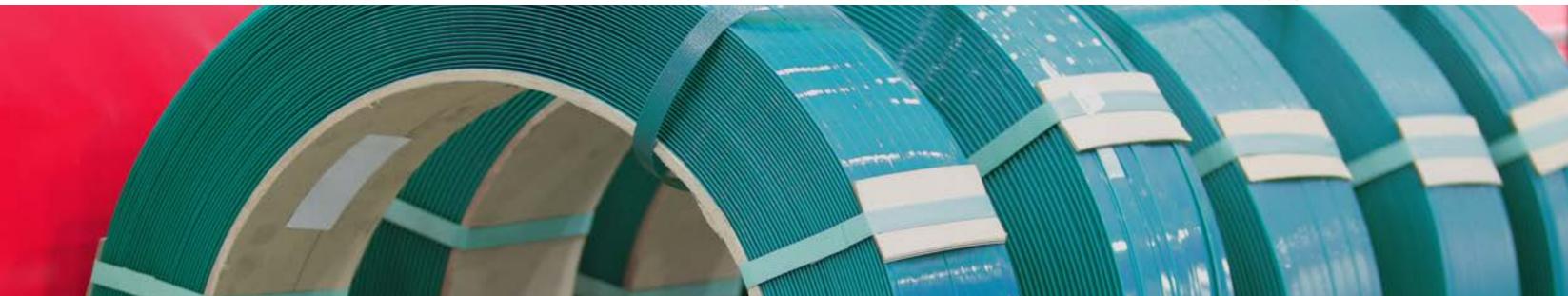
### Chemicals 🧲 ≥ Polypropylene

## Polypropylene - Technical Textiles

## Repsol Isplen

Grade (*)	MFI	Key properties	Applications	
	<b>ISO 1133 g/10'</b> 230 °C 2,16kg			
PP015G3E	0.8	Greater tenacity.		
PP020G3E	1.0	High tenacity.	High tenacity strappings, thermoforming	
PP030G1E	1.7	Good mechanical properties.	High tenacity raffia and monofilaments, ex	
PP031G1E	2.2	Good balance of processability and properties.		
PP040G1E	3	Good balance of processability and properties.	Raffia textiles, monofilaments, and ropes.	

\* All our portfolio is phthalate free



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. 2021. All rights reserved.

, profiles.

extruded nets, twines, and ropes.

5.

#### Polyethylene < > PP Nonwoven textiles

## Polypropylene - Nonwoven Textiles

## Repsol Isplen

			Applications	
Grade (*)	MFI	Key properties	Applications	
	<b>ISO 1133 g/10'</b> 230 ℃ 2,16kg	Type Molecular Weight Distribution (MWD)		
PP051Y1E	4	Good mechanical properties, high tenacity fibers.	Raffia and monofilaments for general purp	
PP086Y3E	25	Narrow MWD, gas fading resistance.	Continuous filament high speed lines (BCF	
PP086U6E	25	Narrow MWD, UV light resistance, gas fading resistance.	and low title hygienic fabrics, spunbonded	
PP089Y1E	31	Narrow MWD, gas fading resistance.	Continuous filament high speed lines (BCF and low title hygienic fabrics, spunbonded	
NW080M4	800	Fine fibers, filtered, narrow MWD.	Malt blown filtration byginnic application	
NW110M4	1100	Fine fibers, filtered, narrow MWD.	Melt blown, filtration, hygienic application	

\* All our portfolio is phthalate-free



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. 2021. All rights reserved.

urposes. Very high tenacity staple fiber.

3CF/CF), partially oriented yarn (POY), technical nonwoven ded and staple fibers.

3CF/CF), partially oriented yarn (POY), technical nonwoven ded, and staple fibers.

ons.

# Repsol's Values

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

## Safety is our priority

Petrochemical complexes, packaging facilities, and logistics centers all have ISO 45001 certification for their rigorous safety measures.

ISO 45001

Petrochemical plants, packaging production plants, and logistics

All industrial complex **FSSC 22000** 



Technical Data Sheets and MSDS are available on: www.repsol.com

Repsol supplies grades with excellent properties, specially designed for applications with stringent quality specifications.





Accountability

Results Orientation

Collaboration



Inspiring

© REPSOL QUIMICA, S.A. 2021. All rights reserved.



At Repsol, we understand that innovation goes beyond developing new solutions for your business, encompassing a constant and firm commitment to meeting our customers' needs.

## Quality

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

**ISO 9001** 

All petrochemical plants

## Environment

We set up and deployed an ambitious CO, program reduction, called Plan3030, that pursues a 30% reduction in our carbon intensity indicator. Energy efficiency programs to reduce energy consumption and GHG emissions are critical elements of our strategy.

These programs pursue long-term targets that have been made public to facilitate their progress by the stakeholders. In this sense, Repsol Química is committed to reducing 0.26 million metric tons per year of GHG emissions in 2021-2025 Strategic Plan and 0.7 million metric tons per year reduction until 2030 with a roadmap to be a net-zero business sooner than 2050.

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 and managing 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 performance improvement, thus contributing to more efficient and sustainable energy use.

Repsol aims to become a net-zero emissions company by 2050, and our 2021-2025 Strategic Plan enables us to continue successfully advancing our multi-energy commitment.

ISO 50001 / ISO 14001 / ISO 14064

Puertollano, Tarragona and Sines

#### December 2021



## **Chemicals Customer Care**

**ITALY** Tel.: 800 60 509 999 Tel.: +34 91 753 18 04

### GERMANY

Tel.: 800 60 504 444 Tel.: +34 91 753 18 00

### UNITED KINGDOM

Tel.: 800 60 502 222 Tel.: +34 91 753 18 03

SPAIN

Tel.: 900 10 32 39 Tel.: +34 91 753 18 01

### PORTUGAL

Tel.: 800 60 501 111 Tel.: +34 91 753 18 05

### FRANCE

Tel.: 800 60 503 333 Tel.: +34 91 753 18 02

> sacrq@repsol.com www.repsol.com



## Corporate Headquarters

Méndez Álvaro, 44 28045 Madrid. Spain Tel.: +34 91 753 81 00 www.repsol.com

## Technical Service & Development

Agustín Betancurt, s/n 28935 Móstoles, Madrid. Spain Tel.: +34 91 753 86 00 atd\_poliolefinas@repsol.com