REPSOL

Let's invent the future

EV - Fluids

Catalog

Introduction

For several years now, Repsol has been immersed in a process of transformation and diversification of its businesses with the aim of leading the energy transition. We were the first company in our sector to support the Kyoto Protocol, the first to issue a green bond, and in December 2019 we were the first to set the goal of becoming a net zero emissions company by 2050, with intermediate targets for reducing its carbon intensity indicator in 2020, 2025, 2030 and 2040.

In 2019 we launched the **Hybrid Range,** low-viscosity synthetic lubricants that reduce CO2 emissions and environmental impact, designed to deliver the best performance in hybrid vehicles with gasoline and electric motors, both plug-in and not.

The new **EV-Fluids range** adds to Repsol's commitment to electric mobility, with products formulated to guarantee the optimal functioning of electric vehicles. With this initiative, we are consolidating our position as a key player in electric mobility in Spain and strengthening our goal of being a zero net emissions company by 2050, in accordance with our 2021-2025 Strategic Plan.

To achieve net zero emissions by 2050, Repsol is committed to a model that integrates all technologies for decarbonization, based on:

The Repsol Commitment
Net Zero Emissions
by 2050

- improved efficiency
- renewable power generation
- low, zero, or even negative carbon footprint products
- circular economy
- industrial innovation
- development of new solutions based on digitalization

Innovation and technology

At Repsol, we have been researching and improving energy for transport, as well as developing alternative energies, for more than 70 years. We lead several initiatives aimed at contributing to the mix of new energy solutions for transport and mobility. In addition, the Repsol Technology Lab (Móstoles, Madrid), one of the most avant-garde private R&D models in Spain based on open innovation and networking in alliances with technology centers, companies and universities from all over the world, researches and develops projects in the field of electric mobility related to energy storage with different electrochemicals, fast and ultra-fast charging technologies, etc.

The Repsol Technology Lab is one of the most cutting-edge private R&D models in Spain.

Our researchers at the Repsol Technology Lab, together with the Technical Assistance and Lubricant Development team, have established the most suitable formulas for the products that make up the EV-Fluids Range, seeking the best dielectric properties and ensuring compatibility with new materials, in order to meet all the specific needs of electric vehicles. From outstanding cooling of all components to excellent lubrication and protection of the electric motor and transmission, as well as optimum braking system response, all guaranteed.

EV-Fluids range

The new range of fluids for electric vehicles is formulated with the most advanced technology and consists of: Battery Thermal Fluid, Coolant Antifreeze 50%, Drive ATF, Brake Fluid DOT 5.1 and Complex Synth Grease.

Battery Thermal Fluid

Biodegradable dielectric fluid with excellent heat removal capacity and high resistance to oxidation, especially suitable for direct refrigeration (immersion) for batteries, electric motor, inverters or other components of electric vehicles that require good temperature control to optimize their operation.

Quality levels:
- IEC 61100 fluid type K3
- IEC 61099 synthetic organic esters.

Coolant & Antifreeze 50%

Cooling fluid with extraordinary heat removal capacity and resistance to oxidation at high temperatures. Particularly suitable for indirect refrigeration of electric vehicle components such as batteries, electric motors or inverters that require good temperature control to optimize their operation.

Quality Levels:
- ASTM D 3306
- BS 6580:2010
- CUMMINS CES 14603
- MAN 324 type Si-OAT
- MB 326.5
- SAE J 1034 and J 814
- UNE 26-361-88
- Volkswagen VW TL 774 G (G12++)

Drive ATF

Low viscosity lubricant for automatic transmissions in electric vehicles, designed to protect gears and reducers bearings from wear and corrosion, with improved oxidation stability and excellent dielectric properties.

Quality levels:
- Ford Escape hybrid eCVT
- GM DEXRON VI
- Jatco JR712E
- Toyota THSII

Brake Fluid DOT 5.1

Fluid developed for hydraulic brakes of electric and hybrid vehicles with high boiling points (dry and wet), low viscosity and lower conductivity. Broad applicability, as it meets the DOT 5.1, DOT 4LV, DOT 4 and DOT 3 specifications.

Quality levels:
- ISO 4925 (Classes 3, 4, 5.1 & 6)
- SAE J-1703, J-1704
- US FMVSS 116 DOT 5.1, DOT 4, DOT 3

Complex Synth Grease

Long-lasting synthetic grease recommended for the lubrication of bearings, electric motors and other components of electric vehicles, with specifically developed lubricating and conductivity properties for high protection and optimum performance.

Quality levels:
- DIN 51825 KPEHC 2/3N-40

✓ Excellent lubrication and protection
of the electric motor and transmission.

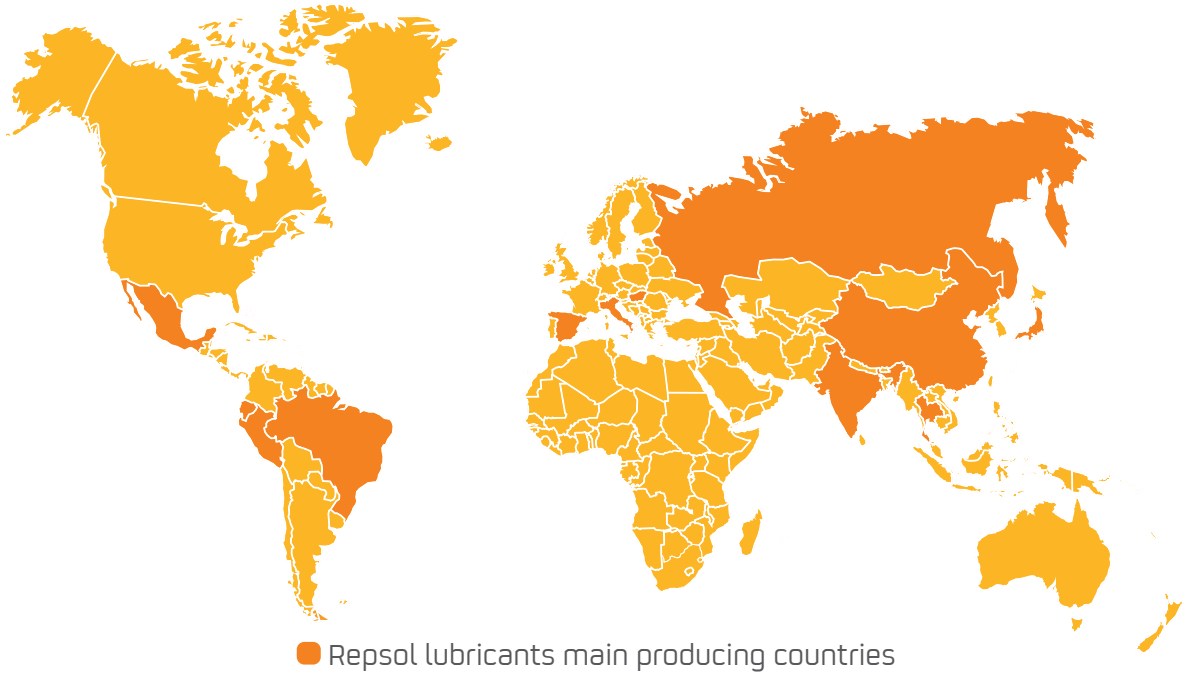
✓ Exceptional cooling
of all components, especially the batteries.

✓ Optimal response
of the braking system.

Production

Repsol has lubricant manufacturing and packaging plants all over the world: Spain, Italy, Indonesia, China, Japan, Peru, Russia, Brazil, Ecuador, India, Thailand and Hungary, that supply lubricants worldwide. To support this growth, shares were acquired in the companies Bardahl, with a plant in Mexico and United Oil Company, with plants in Indonesia and Singapore. These alliances allow us to strengthen our presence in both Latin America and Southeast Asia. These new production capacities enable supply to more than 80 countries.

We have facilities that analyze raw materials, intermediate products and, of course, final products before they are retailed so that they meet Repsol's strictest standards, regardless of the manufacturing plant.



Repsol lubricants main producing countries

Packaging

PRODUCT	DRUM 20L	CONTAINER 5L	CONTAINER 500 ml	CONTAINER 400 g
Battery Thermal Fluid	✓	✓		
Brake Fluid DOT 5.1			✓	
Complex Synth Grease				✓
Coolant & Antifreeze 50%	✓	✓		
Drive ATF	✓			

Commercial Offices

Central Offices
c/ Méndez Álvaro, 44
28045 Madrid, España
Tel: 901 111 999
lubricantes@repsol.com

Asia-Pacific
Víctor Velázquez López
10 Marina Boulevard, #14-01
Marina Bay Financial Centre Tower 2
Singapore 018983
Tel: (+65) 6808 1065
vvelazquezl@repsol.com

Brazil
Silvio Frasson
Rua Leopoldo Couto de Magalhães Júnior, 758
11º andar, escritórios 111 e 112, Itaim Bibi
04542-000 São Paulo, Brasil
Tel: (+55) 21-25597200
silvio.frasson@repsol.com

France
Jean-Christophe Hastaran
Tel: (+33) 1 46 96 65 23
Mob: (+33) 6 86 83 08 22
Fax: (+33) 1 46 96 66 42
jchastaran@repsol.com

Peru
Víctor Rivera Bernuy
Av. Víctor Andrés Belaúnde, 147
Edif. Real 5, Piso 3, San Isidro, Lima, Perú
Tel: (+51) 215-6225
Cel: (+51) 939239060
Fax: (+51) 421-8591
v.rivera@repsol.com

Portugal
João Vasques
Av. José Malhoa nº 16 B, 8º
1099-091 Lisboa, Portugal
Tel: (+351) 213 119 000
sac.rlesa@repsol.com

Let's invent the future

© Repsol. June 2021

Repsol Lubricantes and Especialidades S.A. C/ Méndez Álvaro, 44, 28045 Madrid (Spain)
repsol.com