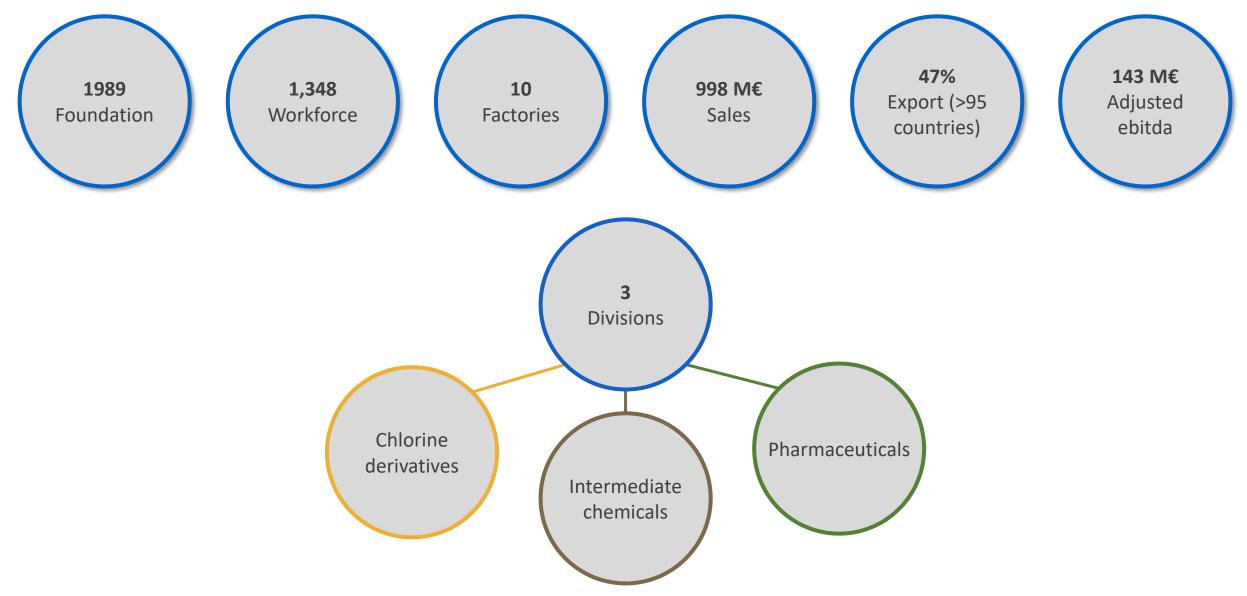
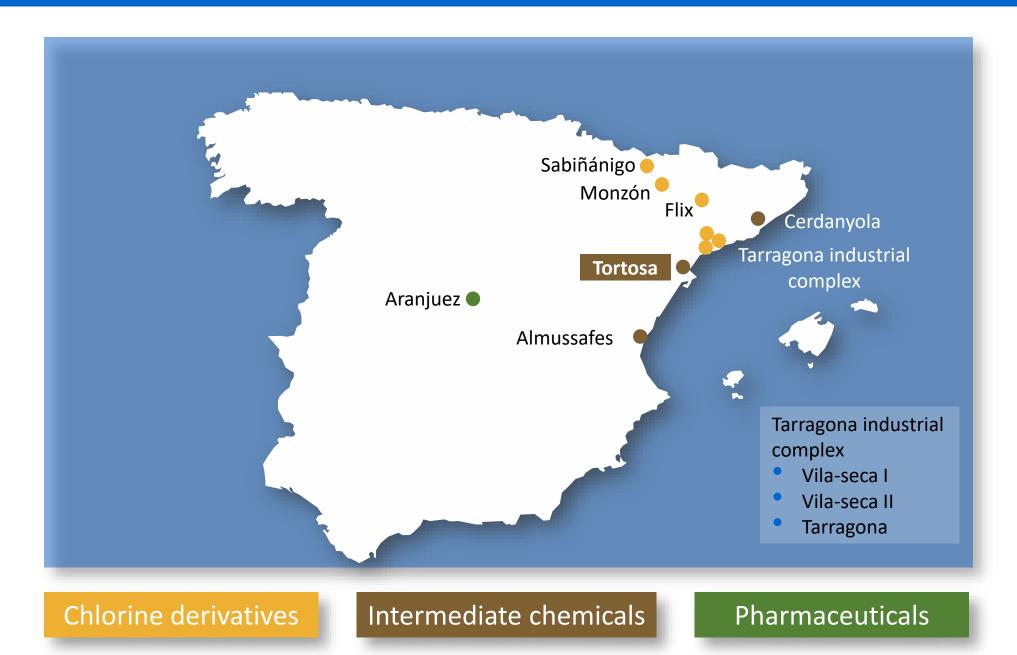


Tortosa factory

Key data. Year 2022



Factories



3

Key facts about the Tortosa factory. Year 2022



The Baix Ebre industrial estate



Products, applications and market shares. Year 2022

- Formaldehyde is the core product of the Tortosa factory and methanol its main raw material.
- In turn, formaldehyde is used to manufacture the following polyols: pentaerythritol, dipentaerythritol and sodium formate.

Products	Applications		
Dipentaerythritol	Synthetic lubricants		
Formaldehyde	Manufacture of derivatives		
Sodium formate	Tanning industry		
Pentaerythritol	Paints		

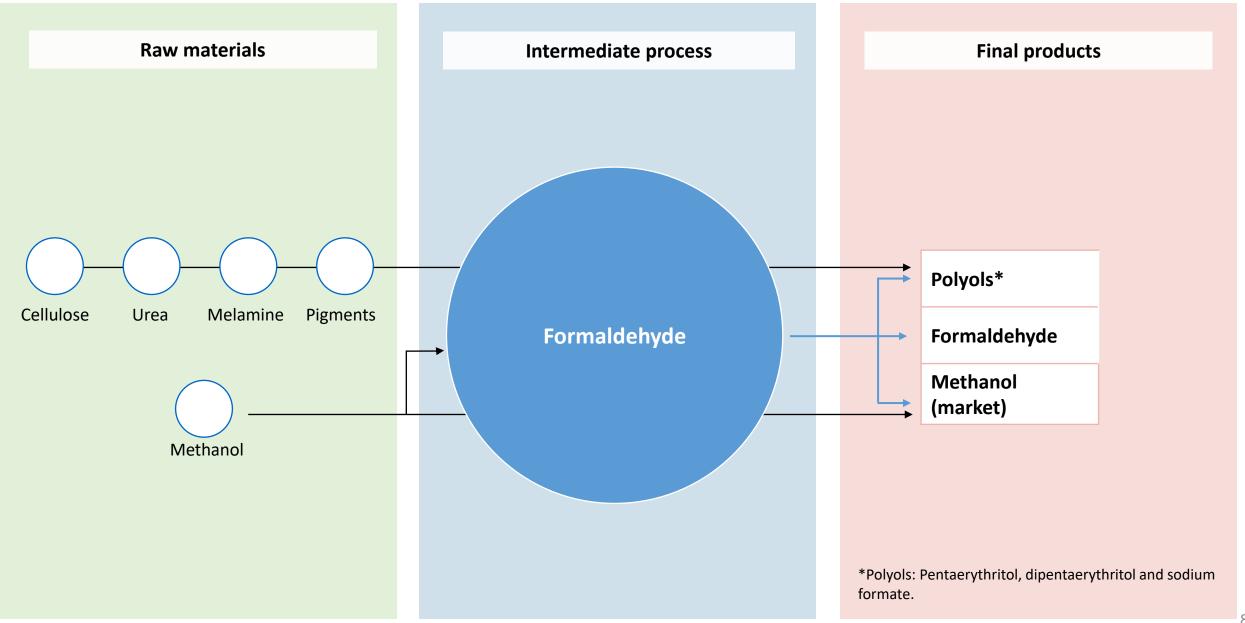
Ranking by market share				
Spain		Europe	World	
Formaldehyde	1 st	5 th	-	
Polyols*	1 st	2 nd	3 rd	

*Polyols: Pentaerythritol, dipentaerythritol and sodium formate. The data provided comes from calculations made by Ercros.

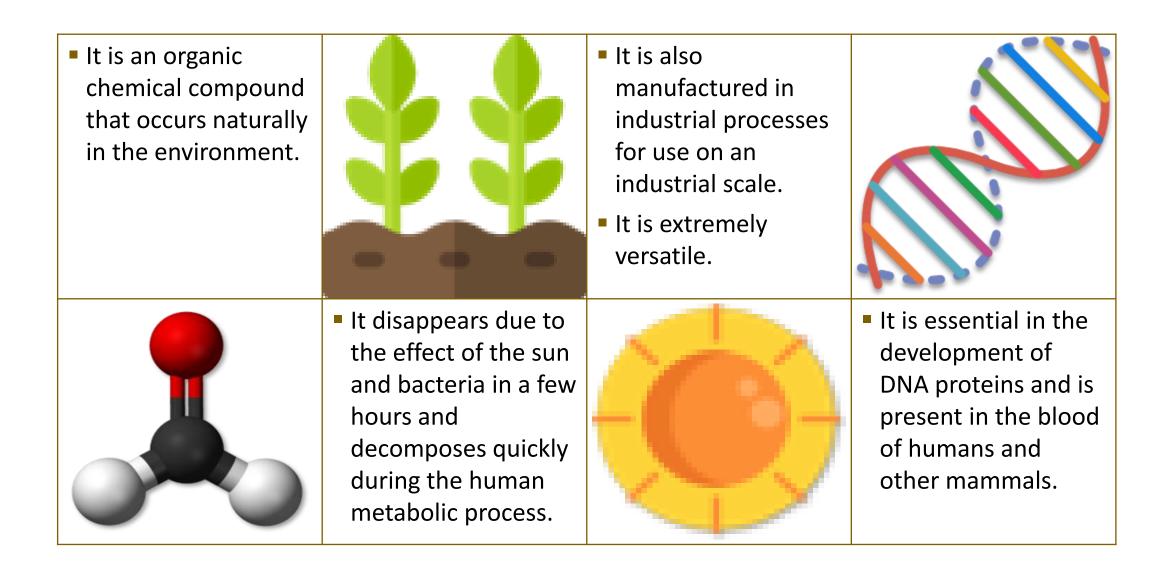
Production and facilities



Scheme of the Tortosa production process



Formaldehyde (CH₂O)



Formaldehyde, present in our environment

- In foods, such as fruits, meats, and vegetables (sometimes in large doses).
- In the natural decomposition of methane (from farms and agricultural facilities).
- In other volatile organic compounds produced by human activity (cars, stoves, heating systems).



Pentaerythritol (C₅H₁₂O₄)

Applications

- Resins and lubricants.
- Paints and plasticizers.
- PVC stabilizers.
- Printing inks.
- Polyurethane foams.
- Explosives.



Markets

- Only Spanish producer.
- It exports almost 90% of production.

Dipentaerythritol ($C_{10}H_{22}O_7$)



Applications

- Synthetic lubricants.
- Special inks.
- PVC stabilizers.

Markets

It exports more than 80% of production.

Sodium formate (CH₂O₂Na)



Markets

- Main: Spain and Portugal.
- Others: Europe, South America and Asia.



Did you know?

 It is used as antifreeze on airport runways because it is less polluting than salt.

Applications

- Treatment of leather.
- Production of sodium hydrosulfite and formic acid.



The 3D Plan in Tortosa

- The 3D Plan is the strategic plan launched by Ercros, which pursues its transformation into a sustainable company and is based on three dimensions: diversification, digitalisation and decarbonisation.
- Main actions at the Tortosa factory:
 - Expansion of dipentaerythritol production capacity to gain market share in Asia and the USA
 - Installation of units to use waste heat from processes to maximize the use of waste energy to replace natural gas and, consequently, reduce CO₂ emissions.
 - Under study, installation of a photovoltaic park of 6 GWh/y.
 - Electricity generated from renewable sources would cover 18% of the factory's needs.





- The Tortosa factory is the headquarters of the R&D department of the intermediate chemical division. The products and processes of this business have been developed in this centre.
- The main R&D projects that are in the development phase are:
 - Improvement of the polyol process to increase production efficiency.
 - New range of ErcrosTech resins with various applications in wood laminates and metal coatings.
 - Improvement of the production process of moulding compounds to offer new qualities.



ESG Accreditations

- Prevention management system according to ISO 45001.
- Quality management system according to ISO 9001.
- Energy management system according to ISO 50001.
- Environmental management system according to ISO 14001.
- Verification of greenhouse gas (GHG) emissions according to ISO 14064.
- Registration in the European Eco-Management and Eco-audit Register, EMAS.













Programs and ratings

- Responsible Care: Program of good practices in sustainability of the global chemical sector.
- Global Compact: Program promoted by the UN that contains 10 principles of action.
- Carbon Disclosure Project (CDP): Organization aimed at assessing the behavior of affiliated companies regarding to the climate emergency.
- Southern Catalonia Green Hydrogen Platform: Interest group led by the Rovira i Virgili University, whose purpose is the implementation of green hydrogen.
- Climate action of the Generalitat de Catalunya: Commitment to achieve neutrality of CO₂ emissions by 2050.
- EcoVadis: International sustainability rating (score 84/100 in 2022).









Compliance with the sustainable development goals (SDGs)

In the development of its activity, Ercros contributes to the fulfillment of the 17 SDGs established in the UN 2030 Agenda, although it has a special impact on:

- **SDG 3:** Good health and well being.
- **SDG 6:** Clean water and sanitation.
- **SDG 7:** Affordable and clean energy.
- **SDG 8:** Decent work and economic growth.
- **SDG 9:** Industry, innovation and infrastructures.
- **SDG 12:** Responsible consumption and production.
- SDG 13: Climate action.



Associations













Thank you

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