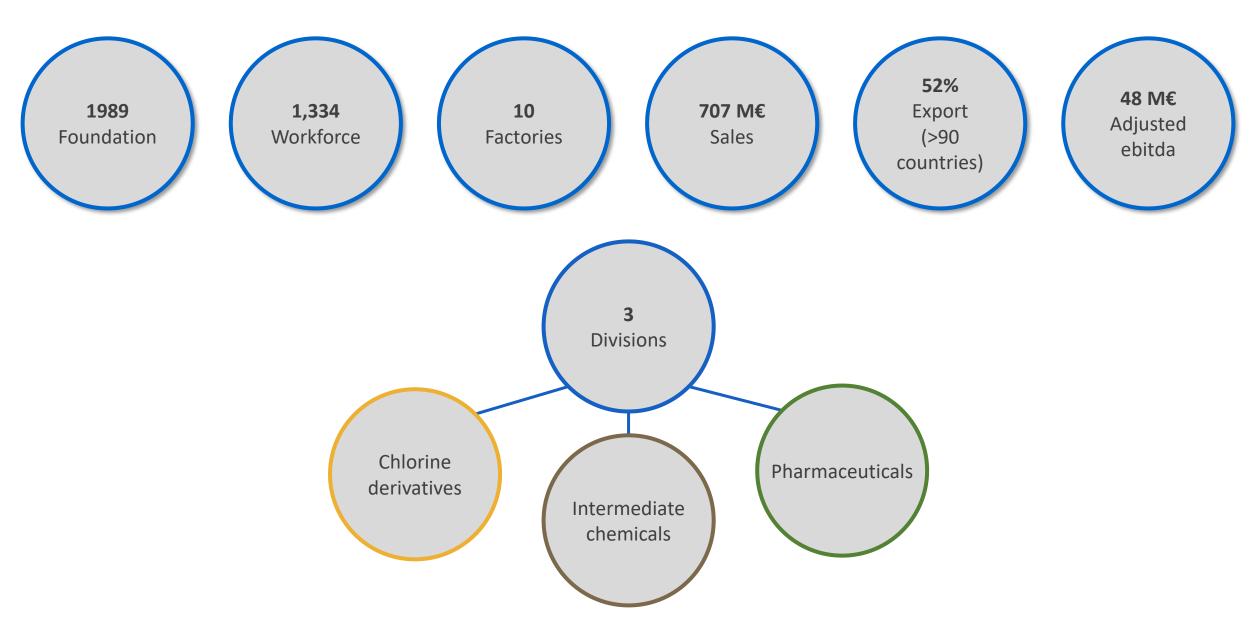


Tortosa factory

Key facts. Fiscal year 2023



Factories



Chlorine derivatives

Intermediate chemicals

Pharmaceuticals

Key facts about the Tortosa factory. Fiscal year 2023











The Baix Ebre industrial estate



Products, applications, and market shares. Fiscal year 2023

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

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

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

^{*}Polyols: pentaerythritol, dipentaerythritol and sodium formate. The data provided comes from calculations made by Ercros.

Production & facilities

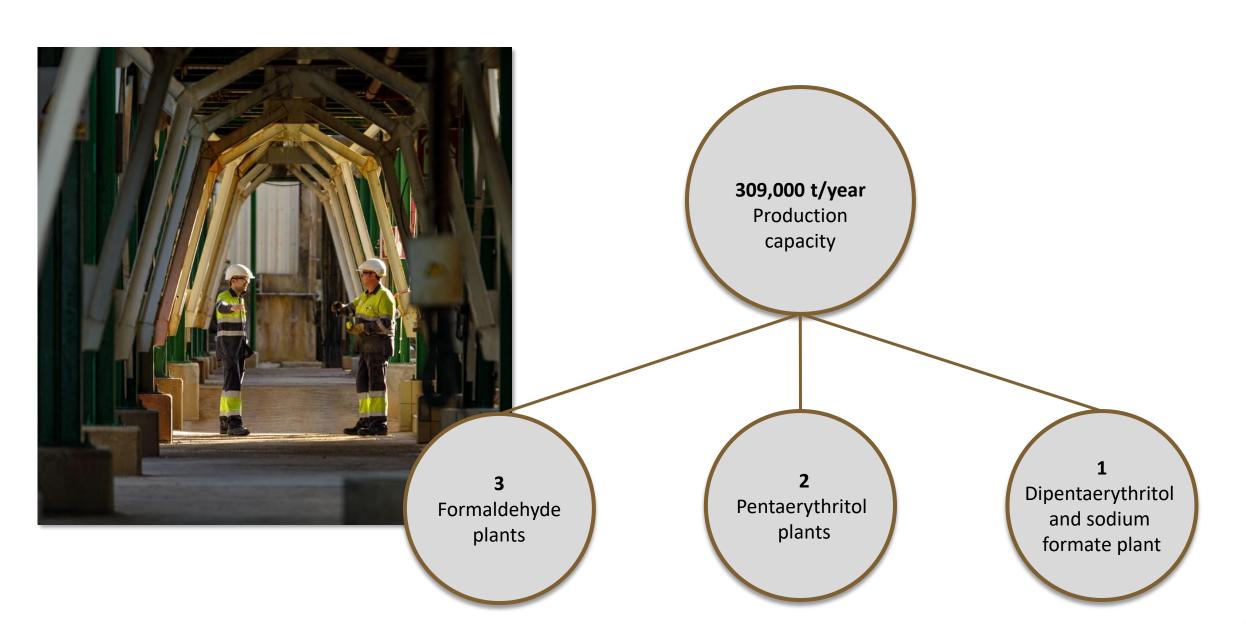
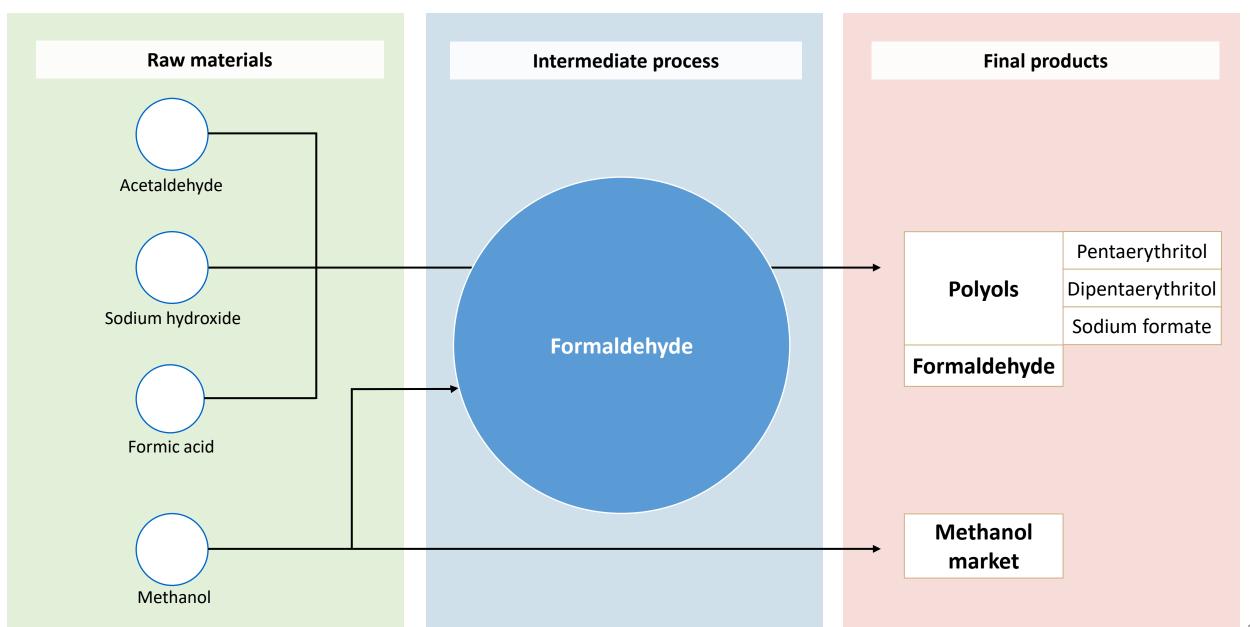
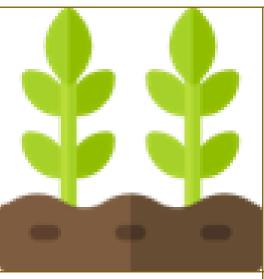


Diagram of the Tortosa production process

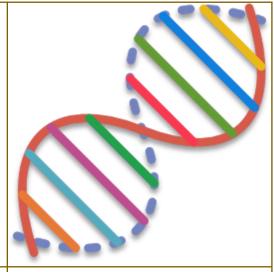


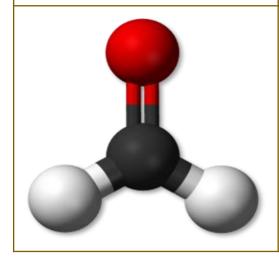
Formaldehyde (CH₂O)

 It is an organic chemical compound that occurs naturally in the environment.



- It is also manufactured in industrial processes for use on an industrial scale.
- It's extremely versatile.





It disappears due to the effect of the sun and bacteria within a few hours and is quickly broken down during the human metabolic process.



It is essential in the development of DNA proteins and is present in the blood of humans and other mammals.

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 its production.

Dipentaerythritol (C₁₀H₂₂O₇)



Applications

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

Markets

Exports more than 80% of production.

Sodium formate (CH₂O₂Na)



Markets

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



Applications

- Leather treatment.
- Production of sodium hydrosulfite and formic acid.



Did you know?

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

The 3D Pla 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 U.S.
 - Installation of waste heat recovery units to maximise the use of waste energy to replace natural gas and, therefore, reduce CO₂ emissions.
 - Under study, installation of a 6 GWh/y photovoltaic park. Electricity generated from renewable sources would cover 18% of the factory's needs.



R&D

- The Tortosa factory is the headquarters of the R+D department of the intermediate chemicals division. The products and processes of this business have been developed in this center.
- The main R+D projects that are in the development phase are:
 - New range of resins
 - Improvement of the polyol process to increase production efficiency.
 - ErcrosTech 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.
- Certificate of Ecomanagement and Audit Scheme, EMAS.
- Healthy organization management system (Sigos).















Programs & ratings

Responsible Care: A programme of good practices in sustainability in the global chemical sector.



 Global Compact: A programme promoted by the UN that contains ten principles of action.



 Carbon Disclosure Project (CDP): an organisation designed to assess the behaviour of member companies in relation to the climate emergency.



 Hidrogen Verd Catalunya Sud Platform: Interest group led by the Rovira i Virgili University, whose purpose is the implementation of green hydrogen.

PLATINUM Top 1%

COVACIS
Sustainability Rating
FEB 2024

- Climate action by the Government of Catalonia: Commitment to achieve CO₂ neutrality by 2050.
- EcoVadis: International sustainability rating (score 85/100 in 2023).

Achieving the Sustainable Development Goals (SDGs)

In the development of its activity, Ercros contributes to the fulfilment of the 17 SDGs set out in the UN's 2030 Agenda, although it has a special impact on the:

- 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 infrastructure.
- SDG 12: Responsible consumption and production.
- SDG 13: Climate action.



Associations













Thanks a lot

For more information
Ercros, S.A.
Tortosa factory

Polígon industrial Baix Ebre, Carrer A 43897 Campedró - Tortosa

Tel.: (+34) 977 454 022

E-mail: <u>tortosa@ercros.es</u>

www.ercros.es