

**Tarragona industrial complex** 

## Key facts. Fiscal year 2023



## **Factories**



3 <mark>3</mark>

## Key data of the Tarragona Industrial Complex (CIT). Year 2023









### Tarragona south industrial park



### **Business model**

- CIT's activity is the production of chlorine, caustic soda and its derivatives: sodium hypochlorite, hydrochloric acid and PVC.
- Chlorine, soda and hydrogen are obtained simultaneously in the same production process, through membrane electrolysis, from sodium chloride dissolved in water (brine) and electricity, in a ratio of 1 ton of chlorine to 1.12 ton of caustic soda and the equivalent of 28 kg of hydrogen.
- The chlorine produced by CIT is used for the internal manufacture of chlorine derivatives, and in particular for the manufacture of PVC.



## Products, applications and market shares. Year 2023

Products	Applications	
Hydrochloric acid	Industry in general	
Chlorine	Manufacture of derivatives	
EDC	VCM manufacturing	
Sodium hypochlorite	Water treatment	
PVC	Construction	
Caustic soda	Industry in general	
VCM	PVC manufacturing	

Ranking by market share		
	Spain	Europe
Hydrochloric acid	1st	-
Sodium hypochlorite	1st	11th
PVC	1st	9th
Caustic soda	1st	9th

The data provided comes from calculations made by Ercros.

### **Diagram of the division's production process**



## The 3D Plan to the CIT

- 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, digitization and decarbonisation or fight against climate change.
- Main actions included in the 3D Plan that affect the CIT:
  - Utilization of the surplus hydrogen generated and not consumed in manufacturing processes for the production of thermal energy instead of natural gas.
  - Construction of a new steam production unit through the combustion of biomass, which is neutral in CO<sub>2</sub> emissions.
  - Condensation energy recovery (REC), which consists of the reduction of direct CO<sub>2</sub> emissions in the facilities through energy optimization, thanks to the recovery of heat from its industrial processes.
  - Installation of a heat recovery unit generated in the hydrochloric acid manufacturing process.
  - Implementation of Big Data, Internet of Things (IoT) and process automation.

DIGITALISATION

ARBONISATION



# Vila-seca I factory

## **Production and facilities**



## **Diagram of the production process of Vila-seca I**



## Chlorine (Cl<sub>2</sub>)

 Chlorine is the chemical element most present in the daily activity of human beings, essential for health and to maintain the quality of life.

### **Applications**

- Manufacture of PVC.
- Manufacture of hydrochloric acid and sodium hypochlorite.
- Water purification.
- Disinfection of swimming pool water.

#### Markets

 It is intended for self-consumption to manufacture chlorinated derivatives and PVC.



## **Caustic soda (NaOH)**

 Caustic soda is a base product for the chemical, aluminum, textile, paper and cellulose industries.



### **Applications**

- Aluminum manufacturing.
- Cellulose manufacturing.
- Manufacture of detergents.

### Markets

- 30% is consumed in the same center.
- The rest is mainly sold in Spain.

## Sodium hypochlorite (NaClO)



#### **Applications**

- Water purification.
- Disinfection (bleach).
- Bleach of paper pulp and textile fibers.

#### Markets

- Spain
- France

## Hydrochloric acid (HCl)

### **Applications**

- Industry in general.
- Pharmacy.
- Cleaning.
- Agrochemistry and food.



## Hydrogen (H<sub>2</sub>)

### **Characteristics**

- It is the most abundant chemical element on earth.
- It is a fuel with multiple applications.



### **Applications**

- Ammonia and methanol production.
- Hydrogenation of fats and oils.
- Car battery as a clean energy source.
- Ercros is part of the Green Hydrogen Platform Southern Catalonia, an entity that aims to face the climate emergency and turn the region into a leader in energy transition.



# Vila-seca II factory

## **Production and facilities**





## **Diagram of the Vila-seca II production process**



## PVC ((C<sub>2</sub>H<sub>3</sub>Cl)n)

### **Applications**

- Pipes
- Profiles for doors and windows
- Cables
- PVC film
- Vinyl floors
- Insulation
- PVC compounds

### Markets

- A small part goes to the center of Monzón to manufacture compounds.
- The rest is destined for the Spanish market and is exported mainly to EU countries.





# **Tarragona factory**

## **Activity of the Tarragona factory**

### **Characteristics**

 The Tarragona factory provides services to third parties.



### **Auxiliary services**

- Air.
- Cooling and demineralized water.
- Wastewater treatment.
- Vapor.





#### **General services**

Expeditions

- Prevention
- Gatehouse
- Surveillance
- Logistics



### Clients

- Andrés Pintaluba
- Sekisiu
- TDE

## **ESG** accreditations

- Prevention management system according to ISO 45001.
- Quality management system according to **ISO 9001**.
- Environmental management system according to ISO 14001.
- Energy management system according to ISO 50001.
- Verification of greenhouse gas (GHG) emissions according **to ISO 14064**.
- Registration in the European register of ecomanagement and ecoaudit (EMAS).
- Verification of compliance with the Good Corporate Governance Index (**IBGC**).
- Healthy Organization Management System (Sigos).
- Operation clean sweep (**OCS**).



## **Programs and ratings**

- **Responsible Care: p**rogram of good practices in sustainability in the global chemical sector.
- **Global Compact:** program promoted by the UN that contains ten principles of action.
- Carbon Disclosure Project (CDP): organization aimed at assessing the behavior of affiliated companies regarding the climate emergency.
- Green Hydrogen Platform Southern Catalonia: 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 CO<sub>2</sub> emissions neutrality by 2050.
- **EcoVadis:** international sustainability rating (score 85/100 in 2023).
- **RE4Industry:** EU project for 100% renewable energies for electrointensive industries.
- Vinyl Plus: commitment of the European PVC industry to develop greener ways of producing, using and recycling this product.
- **ECVM Charter:** sustainable practice program for European PVC manufacturers.





PLATINUM Top 1% **ECOVOCIS** Sustainability Rating FEB 2024





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 and participations**

















## Thank you

For more information Ercros, S.A. Tarragona Complex Autovía Tarragona-Salou C-31 B, Km 6 43480 Vila-seca (Tarragona) Tel.: (+34) 977 370 354 E-mail: complejotarragona@ercros.es <u>www.ercros.es</u>