

ACID ZINC

ZINC BRIGHT ACID

1. OVERVIEW

The **ACID ZINC** process for acid zinc baths, used in immersion lines and rotary drum, allows to obtain deposits of very good penetration and excellent brightness in areas of low, medium and high current density with good behavior at high temperature. The corrosion properties are far exceeded with the use of BYCSA's chromatic line.

2. ADVANTAGES

1. Wide temperature range for production. o It allows the obtaining of an excellent brightness. o It has good ductility in zinc deposits. o Good behavior for galvanizing cast and hardened iron. o Handles high penetration and tank speed at different current densities. o Low cost in the treatment of your effluents.
2. The bath can have cathodic agitation in immersion baths, due to the effect of the movement of the drum and preferably through the use of continuous filtration that allows to increase the penetration and ensure more homogeneous zinc layers both in static and drum processes.
3. With the use of our **ZINCASID PURIFIER** you can keep controlled the contaminations of iron and copper that the bathroom may have.

1. PHYSICO-CHEMICAL PROPERTIES

ACID ZINC

ACID ZINC

	TECHNICAL SHEET	CODE: FT-ID-01
		VERSION: 1
		DATE: 08/01/2021

	BRIGHTENER	LEVELLER
Appearance	Light brown liquid	dark brown liquid
Density	1.04-1.09 1.06-1.11	pH 3.8-4.8 4.5-6.0

2. BATHROOM COMPOSITION

Zinc chloride	62-72 g/l
Potassium chloride	120-200 g/l
Boric acid	20-30 g/l
ACID ZINC LEVELLER	25-40 ml/L
ACID ZINC BRIGHTENER	0.4-0.6 ml/L

• OPERATING CONDITIONS

TEMPERATURE	25°C-45°C
pH	4.5-5.5
CURRENT DENSITY	Static: 3 A/dm ² (2-5 A/DM ²), T ambor: 0.75 A/DM ² (0.5-1 A/DM ²)
VOLTAGE	2.0-4.0 V for static processing 3.0-8.0 V drum processes, drum speed 3-9 revolutions per minute

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ANODES

99.9% purity in Zinc (titanium basket and can be used up to approximately 7V)

AGITATION

Mechanics

RELACIÓN ANODO CATHODE

1:1

FILTRATION

Go on

TANK

Coated with fiberglass or polypropylene

• SOLUTION PREPARATION

o Place 50 % of the volume of water and heat between 50 – 60 ° C.

1. Add the ZINC CHLORIDE and dissolve completely. o Add POTASSIUM CHLORIDE and dissolve completely. o Add the BORIC ACID and dissolve completely. o Complete tank volume, homogenize and let cool to working temperature.
2. Add the ACID ZINC LEVELLER and the **ACID ZINC BRIGHTENER**, check and / or adjust pH to the recommended value.

1. MAINTENANCE

For higher performance, salts should be maintained in the following ranges.

ADDITIVE	CONSUMPTION PER 10000 AMPS / HOUR
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ACID ZINC LEVELLER	0.5-0.75 ml/L
ACID ZINC BRIGHTENER	1-1.5 ml/L

2. PASIVACIÓN CROMICA

To guarantee corrosion resistance BYCSA has the following trivalent chromatics: **BLACK TRIVALENT CHROME PLATED, BLUE TRIVALENT CHROMATE, YELLOW TRIVALENT CHROMATE, IRID TRIVALENT CHROME, CROMOBYC BLUE R.**

In the same way we have hexavalent chromatics such as: **CCZ12, ZINCRO IRIS, ZINCRO AZUL, UNIFIX 5-60L, UNIFIX 2NL.**

3. PRECAUTIONS AND WARNINGS

Avoid contact with eyes and direct inhalation, otherwise wash with plenty of water for 15 minutes. If the reaction persists, consult your doctor. Do not eat food during product handling. Keep out of reach of children and pets.

4. STORAGE CONDITIONS

Store in a cool, dry, ventilated place. Keep closed in its original container, away from sunlight and preferably from any other source of light and heat of long exposure.

5. MANUFACTURED

BYCSA SA. Barbosa (Plant): Corregimiento Popalito. Finca Los Búcaros km 8 Via a Porce. PHONE: (574)4682016

6. CONTACT US

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		VERSION: 1
		DATE: 08/01/2021

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7. CONTENT UPDATE

Date	Changes made	Responsible	Area
07/06/2022	Upgrading to a new format	Ana Sofia Valencia Ortega	Quality Control

8. REVISION OF THE DOCUMENT

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14/06/2022	Upgrading to a new format	Quality Coordinator	Quality Control

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