

ECONOCLENSE CS

ELECTROLYTIC CLEANER FOR NON-FERROUS METALS

INTRODUCTION

PMD Econoclense CS is a buffered alkaline process particularly recommended for final stage cathodic cleaning of copper, brass and zinc die-castings. Followed by an acid dip (such as PMD Econovate) it leaves the surface in an ideal condition for subsequent electroplating.

CHARACTERISTICS

Econoclense CS is a whitish powder compound containing alkalis, water conditioners and organic surfactants.

OPERATION

For most applications, the operating parameters are:

Concentration	25 – 75 g/l (4 – 12 oz/gal)
Temperature	50 – 80 deg C (120 – 175 deg F)
Current Density	2 – 5 A/dm ² (20 – 50 asf) cathodic
Immersion Time	0.5 – 5 minutes

MAKE-UP AND MAINTENANCE

Econoclense CS is supplied as a dry powder, to be made up to the required concentration with water.

To check the concentration of the working solution, the following simple analysis method may be used:

ANALYSIS METHOD

Reagents

0.1N Hydrochloric acid.
Methyl red indicator.

ANALYSIS METHOD CONTINUED

Method

1. Pipette 5.0ml of working solution into a 250ml conical flask.
2. Add approximately 50ml de-ionised water and mix thoroughly.
3. Add 2-3 drops of methyl red indicator.
4. Titrate with 0.1N hydrochloric acid to a red end point.
5. Record titre = t ml.

Calculation

$$t \times 1.55 = \text{g/l Econoclense CS Cleaner}$$

EQUIPMENT

Tanks	Mild or stainless steel, or other materials suitable for use with alkaline solutions.
Heating	Electric immersion heaters (mild, stainless steel, PTFE), steam, gas or high pressure hot water.

Temperature control is recommended to maintain optimum performance.

DISPOSAL

Dispose of in accordance with local authority requirements.

PRODUCT FAMILIES

The following products or product families are referred to in this data sheet:-

<u>Product</u>	<u>Product Code</u>
PMD Econoclense CS	206017
PMD Econovate	223001

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