



T CLEANER 70

High Detergency Immersion Cleaner

INTRODUCTION

A powdered alkaline chemical which when dissolved in water produces a solution that degreases aluminium and its alloys. Used by dip, it does not etch nor dull polished aluminium surfaces nor noticeably smut high-silicon alloys. On extruded aluminium it dissolves out magnesium oxide and prevents subsequent preferential caustic etching. An excellent degreaser, it also removes polishing compounds from stainless steels and is a suitable mild cleaner for mild steel and zinc to prevent coarse phosphating. Complies with ISO 27831 B2, AMS 03-2C Method B.2(ii).

BENEFITS

- Quickly removes oil, grease, polishing compounds etc.
- Does not normally etch nor smut aluminium and its alloys.
- Prevents subsequent preferential caustic etching of aluminium alloys.
- Also degreases mild steel, stainless steel and zinc.
- Operates at moderate temperatures.
- Keeps oils emulsified over long periods.
- Does not scale up tanks or heating surfaces.
- Contains no silicates and is free-rinsing.

FLASHPOINT

None.

COVERAGE

The rate of consumption will depend on the oiliness and draining efficiency of the jigged items. As a guide, the following has proved reliable:

Dip: 150 – 180 m² /kilo of T Cleaner 70.

APPLICATION

The process sequence is:-

1. T Cleaner 70 dip for 5 – 15 minutes at 60°C – 70°C.
2. Cold water rinse.
3. Hot water rinse and dry-off or proceed to subsequent chemical treatment (see RINSING below).



BATH MAKE-UP

For every 1000 litres of bath:

1. Add approximately 900 litres of mains water and heat to 60 – 70°C.
2. Add 20 kilos T Cleaner 70 and stir until dissolved.
3. Fill the bath to the operating level with mains water stir and bring to operating temperature.

CONTROL POINTS

Pointage cm ³	11.5 – 12.5
Bath temperature °C	60 – 70
Immersion Time mins	5 – 15

BATH CONTROL/REPLENISHMENT

The bath is controlled by a Pointage titration done routinely according to usage and after the bath has been brought to its normal level with water. For example, a bath in continuous use should be tested and replenished at least daily but in occasional use only weekly or before use.

A Test Kit MP0601 containing all the necessary items and replacement chemicals are available from our Sales Offices.

Reagents

Methyl orange indicator
0.1M hydrochloric acid

Method

1. Accurately measure 10ml of the bath in to a flask.
2. Add 100ml DI water.
3. Add 6-8 drops methyl orange indicator.
4. Titrate with 0.1M hydrochloric acid to a red end point.
5. Record pointage (titre).

Replenishment

For every 1cm³ pointage below 12 add 1.7 kg T Cleaner 70 per 1000 litres bath.



RINSING

Rinse the work thoroughly with water in a tank fitted with a weir and continuously overflowed with mains water. To optimize on water usage, this rinse can be used to make good evaporative losses from The T Cleaner 70 tank. A second mains water rinse may be desirable before further chemical processing and the overflow from this can be used to overflow the first rinse if desired. Where the work is to be dried after cleaning, the second rinse can be warmed to assist drying off. Where polished aluminium is concerned, de-ionised water may be necessary to avoid water stains. Any warmed rinse is not normally overflowed but should be changed regularly.

EQUIPMENT

The T Cleaner 70 tank and water rinse tanks can be made of mild steel. The rinse tanks should preferably be painted with a suitable paint. De-ionised water is corrosive and the tank should be made of, or lined with, polypropylene, rigid PVC or stainless steel. Guidance on suppliers of processing equipment may be obtained from our Sales Offices.

ENVIRONMENTAL CONSIDERATIONS

T Cleaner 70 contains no VOCs and the detergent base is made up of readily biodegradable surfactants. There are normally no problems with the discharge of the rinse water to drain but the occasional discarding of the bath requires conditions of temperature (usually not greater than 40°C), suspended solids (usually not greater than 500 ppm) and excess oil to be met. The recommended solution of T Cleaner 70 has a pH of 9 – 10, which is within Water Authorities' normal limits. Any oil skimmed from the surface in operation should not be discarded to the drain.

SAFETY

T Cleaner 70 is a mildly alkaline powder. Before use, refer to Product Safety Data Sheet.

DISPOSAL

Dispose of in accordance with local authority requirements.

PRODUCT FAMILIES

The following products are referred to in this data sheet.

PRODUCT NAME	PRODUCT NUMBER
T CLEANER 70	MP0035-25

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