# OAKITE<sup>®</sup> 61B

# Inhibited Alkaline Tank Immersion Cleaner

# **1** General Description

Oakite<sup>®</sup> 61B is an inhibited, alkaline, immersion powder cleaner for aluminum and aluminum alloy castings, forgings and sheet. It is also suitable for cleaning other metals such as steel, magnesium or titanium. It is especially formulated to remove stenciled identification inks (even baked-on inks), oils and shop soils with no attack on the base metal. Oakite<sup>®</sup> 61B is free-rinsing and provides a chemically clean, water-break free surface.

Oakite<sup>®</sup> 61B is particularly suited for lines processing aluminum per US military specification MIL-DTL-5541 Type I.

Oakite<sup>®</sup> 61B is composed of a blend of biodegradable surfactants and silicate and phosphate containing mineral builders. Sequesters ensure efficiency in hard waters. It is odorless and has moderate tendency to foam.

| Approvals:        |                                    |  |  |
|-------------------|------------------------------------|--|--|
| ✓ Airbus UK       | ABP 8-1290                         |  |  |
| ✓ SAFRAN          | Pr-1500                            |  |  |
| ✓ Boeing          | BAC 5749                           |  |  |
| ✓ Honeywell       | Engineering specification P8254254 |  |  |
| ✓ Lockheed-Martin | n STM 32-301                       |  |  |
|                   |                                    |  |  |

Ask your Chemetall representative for a complete list of approvals

#### 2 Physical and Chemical Properties

| Property                      | Typical Values - Oakite <sup>®</sup> 61B                          |
|-------------------------------|---|
| Physical Form                 | As received: White granular powder<br>As used: Colorless solution |
| Bulk Density                  | 7,5 lb/gal at 68 °F; 0,9 Kg/L at 20 °C                            |
| Maximum Solubility            | 37.5 g/L at 21 °C (5 oz/gal at 70 °F)                             |
| Normal Working Temperatures   | 60 °C to 88 °C (140 ° to 190 °F)                                  |
| Normal Working Concentrations | 22.5 to 60 g/L (3 to 8 oz/gal)                                    |
| ph                            | 12,4 to 12,8  |

These are typical values only and do not constitute a specification.

# 3 Method of use

#### 3.1 Initial Solution Makeup

Ensure that the equipment is clean. Fill the tank to 80 - 90% of its capacity with clean water. Heat to 27 - 38°C (80 - 100°F). Add the required amount of Oakite<sup>®</sup> 61B with mixing. Fill to operating level, mix and heat to operating temperature. It may be air-agitated if desired.

# 3.2 Operation

Exact concentration, temperature, immersion time and degree of agitation needed depend on type and amount of soils and extent of soil build-up in solution.

Run cleaning solution as per the instructions of the OEM standard procedure.

| Concentration    | .15 - 60 g/L (2 - 8 oz / gal) |
|------------------|-------------------------------|
| Total Alkalinity | .0.3 - 1.3 mL                 |
| Temperature      | .50 - 88°C (120 - 190°F)      |
| Time             | .5 - 10 minutes               |



When Oakite<sup>®</sup> 61B is used at over 175°F (79°C), it's recommended to operate a fresh water mist over the tank in order to avoid silicate dry-down as parts are removed from the tank and allowed to drain.

#### 3.3 Solution Measurement

The concentration (total alkalinity) is measured using Gardotest Procedure 122 with a 2 mL sample, Gardotest Indicator 9 and Gardotest Solution 57.

The conversion factor from total alkalinity to g/L is 45. The conversion factor from total alkalinity to oz/gal is 6.

Some industry or military specifications may require other bath measurement and control procedures.

#### 3.4 Solution Replenishment

The solution can be replenished directly by the total alkalinity (T) from Gardotest Procedure 122. To increase the free alkalinity (T) by 0.1 mL, add 4.5 kg of Oakite<sup>®</sup> 61B per 1000 liters of bath (3.75 pounds per 100 gallons).

#### 4 Storage

Dry indoor storage at temperatures between 5 °C and 38 °C (40 °F and 100 °F) is recommended, away from any incompatible materials referenced in the Material Safety Data Sheets. All containers should be tightly closed when not in use.

#### 5 Safety guidance

Before operating the process described it is important that this complete document, together with any relevant Safety Data sheets, be read and understood.

#### 6 Waste release

All waste waters must be treated in accordance with national legislation and local regulations prior to discharge to the sewer.

#### 7 General information

Chemetall supplies a wide range of chemical products and associated equipment for cleaning, descaling, paint and carbon removal, metal working and protection and non-destructive testing. Sales Executives are available to advice on specific problems and applications.

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