

# OAKITE® 61B

## INHIBITED ALKALINE TANK IMMERSION CLEANER

### 1 Description

Oakite 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 61B is free-rinsing and provides a chemically clean, water-break free surface. It is particularly suited for lines processing aluminum per US military specification MIL-DTL-5541 Type I.

Oakite 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	ABP 8-1290
✓ SAFRAN	Pr-1500
✓ Boeing	BAC-5749
✓ Honeywell	Engineering specification P8254254
✓ Lockheed Martin	STM 32-301

Ask your Chemetall representative for a complete list of approvals

### 2 Physical and chemical properties

Property	Test Method
Physical form	As received: White granular powder As used: Colorless solution
Bulk density	0.9 kg/l at 20 °C (7.5 lb/gal at 68 °F)
Maximum solubility	37.5 g/l at 21 °C (5 oz/gal at 70 °F)
Normal working temperatures	60 °C to 88 °C (140 °F to 190 °F)
Normal working concentrations	22.5 g/l to 60 g/l (3 oz/gal to 8 oz/gal)
pH	12.4 to 12.8

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

### 3 Application

#### 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 °C – 38 °C (80 °F – 100 °F). Add the required amount of Oakite 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 g/l – 60 g/l (2 oz/gal – 8 oz / gal)
Total alkalinity	0.3 ml - 1.3 ml
Temperature	50 °C – 88 °C (120 °F – 190 °F)
Time	5 min – 10 min

When Oakite 61B is used at over 79 °C (175 °F), it is 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 61B per 1000 liters of bath (3.75 pounds per 100 gallons).

### 4 Shel life, storage and disposal

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

All local and national regulations on the transport, storage, use and waste treatment of chemicals in concentrated or diluted form and as working solutions must be obeyed.

## 5 General information

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

The above details have been compiled to the best of our knowledge on the basis of tests and research work and with regard to the current state of our practical experience. This technical product information is non-binding. No liabilities or guarantees deriving from or in connection with this leaflet can be imputed to us. Statements relating to possible uses of the product do not constitute a guarantee that such uses are appropriate in a particular user's case or that such uses do not infringe the patents or proprietary rights of any third party. The reproduction of any or all of the information contained in this leaflet is expressly forbidden without Chemetall's prior written consent.

**Headquarters and Regional Head Office  
Europe, Middle East, Africa, South America**  
Chemetall GmbH  
Trakehner Straße 3  
60487 Frankfurt am Main, Germany  
Tel: +49 (0) 69 7165-0  
[surfacetreatment@chemetall.com](mailto:surfacetreatment@chemetall.com)

**Regional Head Office  
North America**  
Chemetall US, Inc.  
675 Central Avenue  
New Providence, NJ 07974, USA  
Tel: +1-908-464-6900  
[chemetallamericas@chemetall.com](mailto:chemetallamericas@chemetall.com)

**Regional Head Office  
Asia-Pacific**  
Chemetall Asia Pte Ltd.  
12 Loyang Crescent  
Singapur 508980  
Tel: +65 6885 7900  
[cm.asia@chemetall.com](mailto:cm.asia@chemetall.com)