

# ENGIKLEEN

Alkaline Cleaning Compound

5840



## DESCRIPTION

**ENGIKLEEN** is designed for the removal of rust, heavy carbon deposits, a host of organic coating and heat modified metallic oxides from ferrous metals.

## APPLICATION



**ENGIKLEEN** has a special application in cleaning jet engine components.

## PRODUCT BENEFITS

- Does not produce hydrogen embrittlement.
- Rinses freely and helps to passivate the surface.
- Extensive bath life using monitored bath control procedures.
- Quickly dissolves rust, scales, paints and carbons.
- Ideal for uses in ultrasonic cleaning equipment.

## PHYSICAL PROPERTIES

Appearance .....	Granule
Colour .....	Off white
Odour.....	Mild amine-like
Total alkali .....	45 -55%
Solubility .....	Water soluble
pH (1% Sol) .....	13.5 ± 0.2

## APPROVALS / CONFORMANCES

- Qualified to ARP 1755B.
- Approved by Pratt & Withney for use in SPOPs 18,212,203,221 and 258.
- Approved GE Aircraft Engines
- Approved by Allied Signal

## DIRECTION FOR USE

**ENGIKLEEN** is used as one part of a multi-stage cleaning process for the removal of heat scale and oxide formations from high temperature alloy jet engine components.

Operating parameters for **ENGIKLEEN** baths:

Concentration : 100 - 250 g/L  
Temperature : 82° - 93°C.  
Immersion Time : 30 - 90 minutes

### Rinsing

Following immersion in **ENGIKLEEN** a thorough water rinse is recommended.

1. Spray rinse components over the **ENGIKLEEN** bath.
2. Immerse components in an overflowing water rinse tank.
3. Pressure spray rinse components upon removal from water rinse tank

### Titanium and Titanium Alloys

Titanium should be processed in a dedicated bath.

#### Non-titanium baths.

Long Soak (P & W SPOP 203 /221):

Concentration: 200 - 250 g/L  
Temperature: 82° - 93°C.  
Immersion Time: 30 - 90 minutes

SPOP 258 for silver brazed and non-silver brazed parts:

Concentration: 200 - 250 g/L  
Temperature: 82° - 93°C.  
Immersion Time: 15 - 30 minutes

**Titanium (and titanium alloys) should be processed in a dedicated bath**

Quick Soak (P & W SPOP 18 Method 1)

Concentration: 90 - 100 g/L  
Temperature: 82° - 93°C.  
Immersion Time: 1 - 4 minutes

Long Soak (P & W SPOP 18 Method 2)

Concentration: 40 - 50 g/L  
Temperature: 82° - 93°C.  
Immersion Time: 15 - 30 minutes.

**Rinse** - As previously described.

Your ORAPI representative will supply full chemical control procedures.

## MATERIALS OF CONSTRUCTION COMPATABILITY

### **Tank Construction**

Stainless steel is recommended for both tank and heating coils.

## STORAGE & SAFETY

**HAZARDOUS** Corrosive Alkaline Powder. Causes Burns to eyes, respiratory system and skin. Wear suitable eye/face protection & suitable gloves when handling. Avoid breathing dusts.

*For further information please refer to the Material Safety Data Sheet*

## PACKAGING

Ref: A-5840-S5 ..... Pail 20Kg  
Ref: A-5840-U1 ..... Drum 200Kg

## WARRANTY

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