Data Sheet

CEE-BEE® A-7X7

Cee-Bee® A-7X7 is an aqueous alkaline cleaner used for immersion, ultrasonic, spray/rinse, steam injection and pre/post NDT cleaning applications. Cee-Bee® A-7X7 is also approved for turbine engine degreasing prior to teardown.

BENEFITS

- Excellent for removing greases and oils in immersion or spray-on applications.
- Effective in ultrasonic cleaning applications.
- Effective at ambient temperature for hand-cleaning operations.
- Free rinsing.
- Safe on steel, aluminum, titanium, magnesium and copper alloys.
- Safe on most paints and plastics.
- Surfactants biodegradable.

CONFORMS TO

- **AIRBUS_08CJA1 (REF. ARP 1755)**
- **ARP 1755A, ARP 1795**
- **ASTM F-945; ASTM F-483**
- **BOEING BAC 5763, TYPE I**
- **BOEING SOPM 20-30-03, SOPM 20-06-01**
- **CFM 56 - SPM 70-00-99 (CP2469 / S1185)**
- **GENERAL ELECTRIC CO4-165, SPM 70-21-15**
- **GOODRICH CMM 32-40-24, CMM 32-40-44, CMM 32-40-50**
- **GOODRICH MESSIER CMM 32-41-75, CMM 32-41-89**
- **GOODRICH & MESSIER-BUGATTI CMM 32-41-83**
- **HONEYWELL SPM 32-49-01, CMM 32-40-13**
- **HAMILTON SUNDSTRAND DIVITION, NTO**
- **INTERNATIONAL AERO ENGINES COMAT NO. 01-339**
- **NSN NO. 6850 01 447 3028**
- **PRATT & WHITNEY SPMC 104 (SPOP 1 & 209)**
- **ROLLS ROYCE OMAT NO. 1/24J**
- **SAFRAN MESSIER-BUGATTI-DOWTY CMM 32-42-15**
- **SAFRAN DMR 70-700**
- **T.O.2J-1-13, PARA 2-152**

McGean-Rohco Singapore Pte Ltd
No. 6 Gul Link, Singapore 629376 Tel: (65) 6863 2296 Fax: (65) 6863 2297 Email: info@ceebee.com.sg

NOTES PRIOR TO HANDLING

Before using your Cee-Bee® products, all safety and operating instructions should be read and understood. If you have any questions, please contact your Cee-Bee® representative before proceeding.

USE PROCEDURES

Hot Tank Cleaning

1. Fill the operating tank to approx. one-half capacity with water. Add the desired amount of Cee-Bee® A-7X7and bring to full tank volume with water. Stainless steel (300 series) is recommended for containing Cee-Bee® A-7X7.

2. Operating concentration and temperature may vary with soil difficulty and range between a 10% to 30% (by volume) solution at 120°F to 160°F (49-71°C). For most applications a 10% to 25% (by volume) solution at 140°F (60°C) for 10 to 30 minutes provides satisfactory results. Please see OEM's recommendations for specific concentration and temperature range. Although heat improves cleaning performance, Cee-Bee® A-7X7can be used at ambient temperature.

Spray-On Cleaning and Degreasing Engine Exteriors

1. Mask all openings to the engine interior (the inlet, exhaust, fuel and oil lines left open, bleeders, breather tubes and open electrical connectors).
2. Spray, steam or foam on Cee-Bee® A-7X7. Allow to dwell 10 to 20 minutes.
3. Flush with warm or hot water.

Ultrasonic Cleaning

1. Mix in water at 15% to 25% concentration.
2. Operate at 120 - 140°F (49 - 60°C) for 5 to 15 minutes.

SOLUTION CONTROL

- **Operating Temperature** - Operating the solution below the recommended temperature will reduce cleaning performance.

- **Concentration** - Cee-Bee® A-7X7 solution concentrations can be determined by UV Spectrophotometer method or Refractometer method as below:

I) CONCENTRATION (UV SPECTROPHOTOMETER METHOD)

Reagents & Equipment
De-ionized water
UV spectrophotometer
10 mm quartz cuvettes
2 ml Class A volumetric pipette
100 ml Class A volumetric flask

Analysis Procedure

1. Pipette 2 ml from a foam-free sample of Cee-Bee® A-7X7 working bath to a 100 ml volumetric flask.

2. Dilute the flask to volume with deionized water, stoppered, and mix well by gentle inversion (keep foam to a minimum).

3. Measure the absorbance of this dilution using a 10 mm quartz cuvette at 275 nm. Use deionized water as a reference blank.

4. **Calculation:**

(Volume %) Cee-Bee® A-7X7 concentration = (sample absorbance @ 275 nm) X (13.9)

SOLUTION CONTROL (Con'td)

The following methods of analysis (Refractometer methods) may not work as reliably if used on contaminated baths or where pH Adjuster has been used heavily. Consult your local Cee-Bee representative when in doubt.

II) CONCENTRATION (REFRACTOMETER READING METHOD)

Equipment
Any reliable Hand-held (0-30 scale) Refractometer.
Digital Refractometer may be used, please refer to the OEM use procedure.

Analysis Procedure (Hand-held):
1. Allow a sample of the Cee-Bee® A-7X7 bath to cool to room temperature (25±2°C).
2. Thoroughly mix the sample and immediately apply a few drops to the inclined rectangular window of the refractometer using the plastic rod provided to make the transfer.
3. Immediately close the plastic cover over the window.
4. Hold the instrument up to a strong light and read the refraction value on the scale (water will read -0-).

Calculations:

Refractometer Reading X 4.45 = % by volume of Cee-Bee® A-7X7

III) PH CONTROL
To ensure optimum performance, maintain bath pH within the range of 10.5 to 12.5 using a reliable pH meter.

Cee-Bee A-7X7 pH Adjuster (Product Code # 26043)
If pH falls below 10.5, add with agitation, 15 grams Cee-Bee® A-7X7 pH adjuster for each 100 liters of tank solution to increase pH by 0.1 unit.

Notes:
- The pH of the bath should be maintained at above 10.5 to ensure good performance and to maintain safety to all metals.

- If concentration and pH are within their recommended ranges, and performance is not satisfactory, the tank should be dumped and recharged with a fresh solution of Cee-Bee® A-7X7.

PROPERTIES

- A clear to slightly hazy liquid.
- Mild solvent odor.

PRECAUTIONS

- Can cause irritation. Avoid eye contact and prolonged skin contact. Wear face shield or goggles and rubber gloves.
- In case of accidental contact, flood with water. If eye irritation persists, seek medical attention. Do not take internally.

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