

# SUPER BEE™ 400TG CLEANER

by Cee-Bee®



## data sheet

**SUPER BEE 400TG** is a liquid concentrate formulated to remove greases, oils, and particulate soil from aluminum alloys, other non-ferrous metals, and steel. Super Bee 400 TG provides long bath life and excellent soil holding and suspension.

### BENEFITS

- Excellent grease, oil, and particulate remover.
- Low foaming when used in agitated immersion tanks.
- Does not contain non-phenol ethoxylate (NPE) or other alkyl phenol ethoxylates (APE's).
- Safe on steel, aluminum, titanium, magnesium and copper alloys.
- Does not contain chromium or solvents.
- Completely aqueous and non-flammable.

### CONFORMS TO

- **BOMBARDIER BAPS 180-001, BAPS 180-40**
- **GOODRICH**
- **GAMPS 4105 - PDS**
- **EMBRAER NE 40-012**

**NOTE: To place an order, call or FAX Customer Service at  
800-932-7006 / FAX 216-441-1377  
Super Bee 400TG Cleaner    Product Code # 20096**



## **NOTES PRIOR TO HANDLING**

**Before using any McGean product, all safety and operating instructions should be read and understood. If you have any questions, please contact your McGean representative before proceeding.**

## **USE PROCEDURES**

### **Immersion Tank Cleaning**

Mix in water at 10% - 25% by volume, depending on degree of contamination. A typical concentration is 15%.

1. Immerse parts in bath at 130-160°F (55 - 70°C) for 5 to 30 minutes. Best results are obtained if the solution is agitated.
2. When cleaning is complete, remove parts from bath and allow excess solution to drain back into the tank.
3. Spray rinse parts over tank and immerse in an air-agitated, overflowing water rinse tank.

## SOLUTION CONTROL

- **Operating Temperature** - Operating the solution below the recommended temperature will reduce cleaning performance. At temperatures below about 120 °F (50 °C), foam may develop.
- **Concentration** - Super Bee 400TG solution concentrations can be determined by UV Spectrophotometer method as below:

### 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 SUPER BEE 400TG working bath to a 100 ml volumetric flask.
2. Dilute the flask to volume with de-ionized water, stopper, 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 268 nm. Use de-ionized water as a reference blank.
4. Calculation:  
(Volume %) SB 400TG concentration = (sample absorbance @ 268 nm) X (25.1).

- **pH** - To insure optimum performance, maintain bath pH within the range of 10.0 to 11.5 using a reliable pH meter. If the pH needs adjusting, use the following addition:

#### Liquid pH Adjuster

If pH falls below 10.0, add with agitation 3 liquid ounces pH adjuster for each 100 gallons (240 ml per 1000 liters) of tank solution to increase pH by 0.1 unit.

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 Super Bee 400TG.

**SOLUTION CONTROL****TITRATION METHOD****Scope:**

To determine concentration of Super Bee 400TG baths at the shop level.

**Reagents and Equipment:**

pH Meter	0.1N acid, standard
250 ml Erlenmeyer flask	Deionized or distilled water
50 ml Burette	
50 ml Volumetric pipette	

**By Titration:**

1. Pipette 50 ml of tank solution into a 250 ml Erlenmeyer flask.
2. Add approximately 50 ml DI water.
3. Titrate with 0.1N acid to pH of 9.0 and record ml acid as A.
4. Continue titration to a pH of 4.0 and record total ml acid as T.

**Calculations:**

$(T - A) \times 1.16 = \% \text{ (vol.) Super Bee 400TG}$

## **PROPERTIES**

- A clear to slightly hazy, pale yellow liquid.
- No flash point. Mild surfactant odor.

## **SAFETY & HANDLING**

- Skin or eye contact can cause irritation. Chemical goggles or face shield and chemical-resistant gloves are recommended.
- In case of accidental contact, flush area thoroughly with water. If irritation persists, seek medical attention.
- Do not take internally.