

SUPER BEE™ 400TG



LOW FOAM CONCENTRATED CLEANER DEGREASER

SUPER BEE™ 400TG is a low foaming liquid concentrate formulated to remove greases, oils, and particulate soil from aluminum and steel alloys, and other non-ferrous alloys. Provides long bath lives, and excellent at soil holding and suspension.

BENEFITS

- Excellent at removing greases, oil, and particulates
- Low foaming when used in agitated tanks or spray washers
- Does not contain nonylphenol ethoxylate (NPEs) or other alkyl phenol ethoxylates (APEs)
- Safe on steel, aluminum, titanium, magnesium and copper alloys
- Does not contain chromium or solvents
- Aqueous and non-flammable

PHYSICAL PROPERTIES

Appearance	Liquid	Solubility	Water Soluble	Flammability	Non-flammable
Colour	Yellow	pH	####	Density	1.075 g/ml
Odor	Mild Odour	Flash Point	N/A		

AVAILABLE FORMATS



20L

20CB400P

208L

20CB400D

1000L

20CB400T

APPROBATIONS

- BOMBARDIER MPS 180-1, BAPS 180-001, BAPS 180-40
- GOODRICH
- GAMPS 4105 - PDS
- EMBRAER NE 40-012

LEGISLATION

- WHMIS Regulated

SAFETY & HANDLING

- Refer to Safety Data Sheet (SDS) for additional information
- Dispose of container and its contents in compliance with all applicable regulations.
- Avoid skin or eye contact, can cause irritation. Chemical safety glasses or face shield, and chemical resistant gloves are recommended while handling. • In case of accidental contact, flush affected areas thoroughly with water. If irritation persists, seek medical attention. • Do not ingest.

Information and recommendations regarding this product are presented in good faith. However no guarantees are associated with the data presented in this document, and no such guarantees should be interpreted from the information and expected results presented. We do not assume any liability for damage, loss or injury, direct or indirect, related to the use of this product.

USE PROCEDURES

IMMERSION TANK APPLICATION:

To prepare immersion bath, dilute SUPER BEE™ 400TG with water, to 10–25 % by volume. Exact dilution volume will vary with degree of contamination; typical bath concentrations are 15 %, by volume.

1. Immerse parts in heated bath at 50–70 °C (120–160 °F), for 5 to 30 minutes. Optimal results are achieved when solution is agitated.
2. Once cleaning is complete, remove and suspend parts above bath while allowing dragged out solution to drain back into the bath's tank.
3. Spray rinse parts over tank, and then immerse in an air-agitated, overflowing water rinse tank.

SPRAY WASHER CLEANING

1. Charge tank with a 5–10 % (by volume) aqueous solution of SUPER BEE™ 400TG and heat to 55–70 °C (130–160 °F).
2. Apply spray wash for 5 to 30 minutes, or as required.
3. If spray washing equipment does not apply a rinse cycle, spray rinse parts with water, or immerse in an air-agitated, overflowing water rinse tank.

SOLUTION CONTROL

• **OPERATING TEMPERATURE:** Operating the solution below the recommended temperature range will affect cleaning performance. Bath foam may develop at operating temperatures less than 50 °C (120 °F).

• **pH CONTROL :** 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:

CEE-BEE® LIQUID pH ADJUSTER (Code de produit # 20CBDPH) • If bath's pH decreases to less than 10.0; add with agitation 240 mL of pH adjuster for each 1000 L of tank solution, to increase pH by 0.1 units. Note that this addition is only effective for pHs below 10.8. For pHs above 10.8, more pH adjuster will be necessary. If tank concentration and pH are within their recommended ranges, and performance is not satisfactory, the tank should be recharged with a fresh solution of SUPER BEE™ 400TG. Consult with your local DeaneCo representative for troubleshooting and recommendations.

• **CONCENTRATIONS:** SUPER BEE™ 400TG bath concentrations can be determined with Ultra Violet (UV) Spectrophotometry and Titration analysis, following the methods detailed below:

UV SPECTROPHOTOMETRY METHOD :

Reagents and Equipment: Deionized water • UV spectrophotometer • 10 mm quartz cuvettes • 2 mL class A volumetric pipette • 100 mL class A volumetric flask.

ANALYSIS PROCEDURE:

1. From a working bath, pipette 2 mL of a foam free, SUPER BEE™ 400TG solution, into a 100 mL volumetric flask.
2. Dilute the flask to volume with deionized water, and mix well by gently inverting flask, while keeping foam to a minimum.
3. Measure the absorbance of solution using a 10 mm quartz cuvette, at 268 nm. Use deionized water as a reference blank.

Concentration Calculation:

Volume % concentration of SUPER BEE™ 400TG concentration = (sample absorbance @ 268 nm) X (25.1).

TITRATION METHOD

Reagents and Methods: pH meter • 0.1N acid standard • 250 mL Erlenmeyer flask • Deionized (DI) or distilled water • 50 mL burette • 50 mL volumetric pipette.

PROCEDURE:

1. Pipette 50 mL of tank solution into a 250 mL Erlenmeyer flask.
 2. Add approximately 50 mL DI water into flask.
 3. Titrate with 0.1 N acid to pH of 9.0, and record mL of acid as A.
 4. Continue titration to a pH of 4.0, and record total mL of acid as T.
- Calculation: (T-A) x 1.16 = SUPER BEE™ 400TG concentration as % volume.

BY REFRACTOMETER METHOD

Hand Refractometer (0-30 scale), A. O. Instrument Co. 10440

1. Allow a sample of the SUPER BEE™ 400TG 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 of 0 to 30 units (water will read -0-).

Calculations: Refractometer Reading x 3.45= % by volume of SUPER BEE™ 400TG