

SUPER BEE™ 400 TG-ML



CONCENTRATED CLEANER DEGREASER

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

BENEFITS

- Excellent at removing greases, oils, and particulates
- Low foaming when used in agitated tanks
- Does not contain Non-Phenol Ethoxylates (NPEs), or other alkyl phenol ethoxylates (APEs)
- Safe on steel, aluminum, titanium, magnesium and copper alloys
- Does not contain chromium or solvents
- Completely aqueous and non-flammable

PHYSICAL PROPERTIES

Appearance	Liquid	Solubility	Water soluble	Flammability	Non-flammable
Colour	Straw	pH	11.5-12	Density	1.034 g/ml
Odor	Light odour	Flash Point	N/A		

AVAILABLE FORMATS



20L

20CB40MP

208L

20CB40MD

1000L

20CB40MT

APPROBATIONS

- AMS 1537B
- BOEING BAC 5749
- BOEING DPM 6629
- LOCKHEED MARTIN STM32-306 Rev. NC dated 4FEB98

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-MG with water, to a concentration of 10–25 % by volume. Exact concentrations will vary with degree of contamination; typical bath concentrations are 15 %, by volume.

INSTRUCTIONS:

1. Immerse parts in bath heated to 39–70 °C (100–160 °F), for 5 to 30 minutes. Optimal results are achieved when solution is agitated mechanically, or with eductors.
2. Once cleaning is complete, remove and suspend parts above bath while allowing dragged out solution to drain back into the bath.
3. Spray rinse parts over tank, and then immerse in an air agitated, overflowing water rinse tank.

SOLUTION CONTROL

- Operating Temperature: Operating bath solution below recommended temperature ranges will affect cleaning performance.
- Bath pH: For optimum performance, maintain bath pH within 9.5 to 12.0 range. Routinely monitor pH using a calibrated pH meter. Routine additions of SUPER BEE™ 400TG-ML, to compensate for bath volume losses, should be sufficient to maintain bath's pH within recommended range.
- If the bath's pH decreases to lower limit, additions of 0.5 % volume concentration of SUPER BEE™ 400TG-ML may be added to raise pH by 0.1 units.

SOLUTION CONTROL

If air agitation is used, then the pH may decrease as carbon dioxide is introduced into the bath. In this case, SUPER BEE™ 300 LF Liquid PH Adjuster may be needed to keep the bath within the pH limits. If required, approximately 0.024% of the tank volume of PH Adjuster will raise the pH 0.1 units. (0.24 gallons of PH Adjuster per 1000 gallons of bath).

TITRATION METHOD

Scope: To determine concentration of SUPER BEE™ 400TG-ML baths at the shop level.

Reagents and Equipment: pH Meter / 250 ml Erlenmeyer flask 50 ml Burette / 50 ml Volumetric pipette / 0.1N acid, standard / Deionized or distilled water

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: $(T - A) \times 1.16 = \% \text{ (vol.) SUPER BEE™ 400TG-ML}$

IMPORTANT NOTE: Analysis by pH is subject to much interference. Make a standard using the water used for makeup to confirm that the analysis is giving reliable results. Variation in water or shop contaminants can greatly alter your results. This titration method should be used only as a guideline.

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

PROCEDURE

1. Pipette 2 ml from a foam-free sample of SUPER BEE™ 400 TG-ML 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 272 nm. Use de-ionized water as a reference blank.
4. Calculation: (Volume %) SUPER BEE™ 400TG-ML concentration = (sample absorbance @ 272 nm) X (8.85).