

Product Data Sheet

Super Bee™ 300LFM

Super Bee™ 300LFM is a low-foaming liquid concentrate for use in spray wash and immersion cleaning applications.

🔶 Conforms To

- Boeing
 - o HMS 20-1267/2125
 - HMS 20-1267/2126
 - HMS 20-1267/2127
 - o HMS 20-1267/2128
- Lockheed
 - o EMAP G32.0200
 - LMC 32-2089
 - Type I, Class 2
 - STM 32-301C
 - Type I, Class 1A
 - EMAP G32.0206

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- STM 32-301C
 - Type II, Class 1A
- Military
 - MIL-PRF-29602A (QPL)
 - USAF Source Control Drawing
 - 9825019 Rev. D

Properties

• A clear to slightly hazy liquid

• Mild solvent odor

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.

🔱 Benefits

- Excellent grease and oil remover.
- Low foaming when used in agitated tanks or spray washers.
- Free rinsing.
- Safe on steel, aluminum, titanium, magnesium and copper alloys.
- Safe on most paints and plastics.





Spray Washer Cleaning

- 1. Charge tank with a 5% to 20% by volume in-water solution of Super Bee[™] 300LFM (depending on degree of contamination) and heat to 120 160°F (50 70°C).
- 2. Spray wash for 5 to 30 minutes as required.
- 3. If spray washing equipment does not employ a rinse cycle, spray rinse parts with water or immerse in an air-agitated, overflowing water rinse tank.

Immersion Tank Cleaning

- 1. Mix Super Bee[™] 300LFM Cleaner at 10 25% by volume with water. The concentration depends upon the degree of contamination.
- 2. Immerse parts in an agitated bath at 120 160°F (50 70°C) for 5 to 30 minutes. Agitation may be mechanical (recommended) or clean air.
- 3. When cleaning is complete, remove parts from bath and allow excess solution to drain back into the tank.
- 4. Spray rinse parts over tank and then immerse in clean, agitated water rinse tank.

Ultrasonic Cleaning

1. Mix Super Bee[™] 300LFM in water at 15% to 25% and operate at 120 - 140°F (50 - 60°C), for 5 to 15 minutes.

NOTE:

• In ultrasonic applications, the solution concentration can be reduced to 8-20% by volume and temperature can be increased to 85-160°F (30-70°C) for a 10-20 minute process time.

Safety, Handling, and Precautions

- 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.





Operating Temperature

• Operating the solution below the recommended temperature will reduce cleaning performance

pH Control

To insure optimum performance, maintain bath pH within the range of 10.0 to 12.0 using a reliable pH meter. Super Bee[™] 300LF pH Adjuster is available in two versions:

Solid pH Adjuster

Add with agitation 1 ounce of solid pH adjuster for each 100 gallons (75 grams per 1,000 liters) of tank solution to increase pH by 0.1 unit. Note that this addition is only valid for a pH below about 10.8. Above pH of 10.8, more pH Adjuster will be necessary.

Liquid pH Adjuster

 Add with agitation 0.02% of tank solution to increase pH by 0.1 unit. Note that this addition is only valid for a pH below about 10.8. Above pH of 10.8, more pH Adjuster will be necessary.

Concentration

Super Bee[™] 300LFM can be maintained using two analytical methods. For most applications, either of the procedures outlined below are applicable (Refractometer or UV Spectrophotometer). For those situations where Super Bee[™] 300LF pH Adjuster is used extensively, the UV Spectrophotometer method must be used to obtain reliable results.



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<u> Solution Control – Concentration Methods</u>

Refractometer Method

Equipment

• Hand Refractometer (0-30 Scale)

Procedure

- 1. Allow a sample of the Super Bee[™] 300LFM bath to cool to room temperature.
- 2. Thoroughly mix the sample and immediately apply a few drops to the inclined rectangular window of the refractometer using a rod 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-).

Caclulations

% by volume of Super Bee™ 300LFM = 5.0 X Refractometer Reading

UV Spectrophotometer Method

Equipment

- UV Spectrophotometer
- 10 mm Quartz Cuvette

- 2 ml Class A Volumetric Pipette
- 100 ml Class A Volumetric Flask

Procedure

- 1. Pipette and transfer a 2 ml sample of the Super Bee[™] 300LFM bath to a 100 ml volumetric flask.
- 2. Dilute the flask to volume using deionized water, stopper, and mix well by gentle inversion to keep foam at a minimum.
- 3. Measure the absorbance of this solution using a 10 mm quartz cuvette at 272 nm. Deionized water can be used as a reference blank.

Calculations

% by volume of Super Bee[™] 300LFM = 10.3 X absorbance units Reading



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