

# CEE-BEE SCALE CONDITIONER J-88L

by *Cee-Bee*<sup>®</sup>



## d a t a s h e e t

**CEE-BEE SCALE CONDITIONER J-88L** is a liquid alkaline/permanganate scale conditioner for use with alkaline scale and rust removers and acid pickles for removing rust, heat scale, hot rolling scale, carbon and organic coatings.

### BENEFITS

- Prepares heat and hot rolling scale for removal in alkaline rust and scale removers, such as Cee-Bee J-84A or J-84AL, or acid pickles such as J-19 or J-3.
- Removes carbon deposits and many chemically resistant coatings from metals which would be damaged by acidic oxidizing agents.
- Safe on steel, nickel alloys, chromium alloys and super alloys.

### CONFORMS TO

- **AMS 1383A (INCLUDES ARP 1755B)**
- **CFM CP2008**
- **GENERAL ELECTRIC CO4-055**
- **INTERNATIONAL AERO ENGINES OMAT 01-165A**
- **PRATT & WHITNEY SPMC 16 (SPOP 211, 213 AND 222)**
- **ROLLS ROYCE OMAT 198C**
- **SNECMA**

### NOTES PRIOR TO HANDLING

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

**NOTE: To place an order, call or FAX Customer Service at  
800-932-7006 / FAX 1-216-441-1377  
Cee-Bee J-88L Product Code #26025**



## USE PROCEDURES

### USE 316 STAINLESS STEEL TANKS AND HEATERS WITH THIS PRODUCT. ALSO USE MECHANICAL AGITATION.

1. Preclean the parts with Cee-Bee Super Bee 300LF to remove oil, grease, carbon and light rust. Rinse thoroughly by dipping in air agitated, overflowing, clear water.
2. Immerse parts in J-88L Conditioner as received at 190 degrees F. to boiling for 30 to 60 minutes.
3. Remove the parts and allow excess solution to drain back into the tank. To reduce dragout loss rinse parts with a light mist of water over the tank, allowing water to fall into the tank. Then dip parts in air agitated, clear, overflowing water or spray rinse with air boosted water. Remove conditioned scale and/or permanganate stains in rust remover or acid pickle.
4. Rinse well. To protect ferrous parts from flash rusting, force-dry with hot air or apply a rust inhibitor Cee-Bee Nortex 3025.

## CONTROL

1. Daily additions of water are required to make up evaporation losses. In hard water areas, soft water is recommended. Periodic additions of J-88 or J-88L and/or J-88 Additive P or J-88 Additive PL are required to make up dragout losses and active ingredients consumed during the cleaning process. To determine concentrations, use the following procedures.
2. The control procedures are based on two analyses: alkalinity and permanganate concentration. To properly carry out these straightforward tests you'll need the following equipment and reagents.

### REAGENTS & EQUIPMENT

Distilled or deionized water	500 ml Volumetric flask
1.0N Sulfuric Acid	250 ml beaker
50% Sulfuric acid	50 ml burette
0.1N Potassium permanganate	25 ml pipette
0.1N sodium Oxalate	10 ml pipette
pH Meter	

## CONTROL (continued)

### Step I. Concentration Based On Alkalinity

1. Pipette a 5 ml tank sample, heated to 190° F., into a 100 ml volumetric flask.
2. Dilute with DI water to 100 mls.
3. Pipette 25 ml diluted J-88L solution into a 250 ml Beaker and dilute to 100 ml with DI water.
4. Titrate with 1 N acid to pH 6.0 using the pH meter. Save solution for step II.

Calculations: ml 1 N acid X 19.08 = % J-88L (vol) based on alkalinity.

If J-88L concentrate based on alkalinity is less than 65% (vol.), raise to 65% (vol.) with additions of J-88L until this value is reached

### Step II. Concentration Based On Permanganate

1. Add 10 ml of 50% sulfuric acid to the previously titrated sample from Step I.
2. Heat to approximately 180 ° F and then add exactly 25 ml of freshly standardized 0.1N sodium oxalate solution
3. If the solution does not decolorize after a few seconds, continue adding exactly 5 mls additional freshly standardized 0.1N sodium oxalate solution until solution decolorizes.
4. When decolorized, IMMEDIATELY back titrate with 0.1N potassium permanganate until faint pink color remains for approximately 30 seconds.

Calculations: (ml 0.1N sodium oxalate - ml 0.1N potassium permanganate) x 3.52= % (vol.)

J-88L based on potassium permanganate.

(% J-88L based on alkalinity - % J-88L based on permanganate) X 0.6 = lbs. J-88 Additive P required for 100 gals. of tank solution.

If J-88 Additive PL is used, calculate addition as follows:

(% J-88L based on alkalinity - % J-88L based on permanganate) X 0.116 = gals. J-88 Additive PL required for 100 gals. of tank solution.

Maintain alkalinity and permanganate concentration at 65-100%.

## PROPERTIES

- A purple to greenish, highly alkaline, strongly oxidizing liquid.

## PRECAUTIONS

- **WARNING! Can cause severe burning.** Contains caustic. Corrosive! Do not allow any contact with eyes, skin or clothing. Can cause severe burns! Do not take internally. Do not breathe any fumes, mist or vapor. Use adequate ventilation. Wash thoroughly after handling. Wear OSHA-approved protective gear including oxidizer/caustic resistant gloves, boots, full face shield, or proper OSHA-approved respirator fitted with the proper filter cartridge. Wear proper protective clothing sufficient to prevent any skin contact.

**SOME FORM OF PROPER EYE PROTECTION IS CRITICAL AT ALL TIMES.  
AVOID SPLASHING NEARBY PERSONNEL DURING SPRAY RINSE.**

- In case of accidental contact with eyes, flush with water for at least 15 minutes. Obtain prompt medical attention! For skin contact, flush with water for at least 15 minutes. If irritation persists, seek prompt medical attention.
- For inhalation, remove to fresh air. Get medical attention. For ingestion, do not induce vomiting. Administer large quantities of water and immediately obtain medical attention.
- Wash clothing before reuse.