



**Chung Kong Chemical Co. Ltd**

## **Technical Data Sheet**

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**Battri-Kleen PL17** is a heavy duty highly alkaline liquid cleaner which may be used as an immersion or spray cleaner and is the market leading cleaner for Battery cans Worldwide. Suitable for cleaning Niclad Battery cases and will effectively remove stamping fluids and long term corrosion inhibitors

**Battri-Kleen17** was formulated to remove a variety of forming lubricant and carbonaceous type soils from ferrous metals. It will also act as a deruster when used at upper end of the recommended concentration range.

**Battri-Kleen PL17** because of its formulation, it is extremely free-rinsing and has been engineered to perform well in Traditional Alkaline and Lithium Ion conditions.

### **ADVANTAGES**

- wide operating temperature range
- Biodegradable surfactant system
- Oil splitting
- Wide operating concentration range
- Low foaming product

### **OPERATING CONDITIONS**

Immersion (Rack or Barrel)

|                |                                    |
|----------------|------------------------------------|
| Concentration: | 5 to 25% by volume                 |
| Temperature:   | 90° to 200°F.                      |
| Time:          | 1 to 6 minutes                     |
| Equipment:     | Mild steel tanks and heating coils |
| Ventilation:   | Suggested                          |

Note: For use in a power spray machine (spiral spray washer, belt washer, monorail washer) operating concentration may range from 1 to 5% (vol.) and operating temperature 90 to 140°F.

Immersion applications concentration range begins at 4% (vol.) and operating temperature range from 100°+.

### **CONTROL**

Titration Procedure

1. Pipette a 10 ml sample into a 250 ml Erlenmeyer flask and dilute with 50 mls of distilled water.
2. Add 4 drops methyl orange indicator and mix.
3. Titrate with 0.5 N hydrochloric acid until the color changes from orange to pink.

**MLS OF 0.5 N HYDROCHLORIC ACID X 0.69 = % BY VOLUME**

#### Test Kit Method

1. Fill bottles 1/3 full of water. Add 1/2 ml of **Battri-Kleen PL17**.
2. Add 4 drops of methyl orange indicator.
3. Add N-94 solution dropwise to a pink endpoint -record number of drops.

$$\% \text{ VOLUME} = 0.71 \times \text{NUMBER DROPS OF N-94 SOLUTION}$$

#### WASTE DISPOSAL

Discharge to a disposal system. In order to be completely informed on the latest regulations for your area, please contact the local authorities.

#### CAUTION

The same working solution of **Battri-Kleen PL17** should not be used to clean copper alloys, steel and stainless steel.

**Battri-Kleen PL17** is an alkaline product and should be handled accordingly. Avoid skin and eye contact. Wear protective clothing, goggles and gloves. Flush exposed areas immediately with clean cold water. Contact a doctor promptly in case of injury. Consult MSDS for details.

#### WARRANTY

The quality of this product is guaranteed on shipment from our plant. If the use recommendations are followed, desired results will be obtained. Since the use of our products is beyond our control, no guarantee expressed or implied is made as to the effects of such use, or the results to be obtained.