

### **BC-1103**

# Phosphorus-free degreasing powder for iron and steel

#### 1. Introduction

BC-1103 Phosphorus-free degreasing powder for iron and steel is a multi-purpose, alkaline chemical degreasing agent, specially used for steel, copper and brass.

## 2. Operating conditions

	Rang	Best
Concentration	40-80g/L	60g/L
Temperature	40-70°C	60°C
Immersion time	1-5min	3min
Tank and heating pipe	steel	
Stirring	mechanical or gentle air stirring	

The precise concentration and temperature depend on the type of oil to be removed. It is not recommended to increase its operating temperature by more than 70°C, which will cause unnecessary heat energy loss. If the concentration is lower than the recommended concentration range, the cleaning performance of the solution is poor, the coating has spots, turbidity and porosity, and the binding force is poor. If the concentration is higher than the recommended range, the surfactant will

separate out and the cleaning effect is poor.

#### 3. Equipment

Plating tank Steel tank

Heater Cold rolled steel stainless steel or titanium heater

Heating control Automatic controller

Stirring Low pressure blower, micro air stirring, mechanical or ultrasonic

stirring

Ventilation Required

#### 4. The method of matching cylinders

Important revelation, please read the precautions carefully before preparing the solution.

Add 3/4 of the volume to the tank, then heat to about 50°C, add the required BC-1103 steel non-phosphorus degreasing powder, which should be added slowly and constantly stirred, when all is dissolved, add water to adjust to the required The final volume is then heated to the operating temperature.

# 5. Solution analysis

Equipment:

(1) 5.0ml pipette

- (2) 25ml measuring cylinder
- (3) 50ml measuring cup
- (4) 300ml conical flask

Required reagents:

0.5N standard hydrochloric acid solution

Phenolphthalein indicator

# **Steps:**

- 1. Pipette 10ml working fluid sample into a 300ml conical bottle;
- 2. Add about 25ml of distilled water and stir evenly;
- 3. Add 5 drops of phenolphthalein indicator
- 4. Titrate with 1.0N standard hydrochloric acid solution until the color changes from purple-black to light yellow as the end point.

Degreaser control:

Pipette 10ml of BC-1103 steel non-phosphorus degreasing powder operating solution sample, add a few drops of phenolphthalein indicator, then use 1.0N hydrochloric acid to titrate the solution to change color, and record the titration ml of hydrochloric acid.

The above titration ml of hydrochloric acid\*6.8 = g/L

( Remarks: The g/L data means the concentration of the solution).