



## T107Z Calcium Sulfonate Additive Package

### ●Product Introduction

T107Z calcium sulfonate additive is according to the special requirements of sulfonic complex grease, special functional additives and polymer materials are added, and it's more conducive to the preparation of high viscosity grease products. The sulfonated complex grease with superior performance can be prepared by adding the corresponding conversion compound. This kind of products widely use on steel, cement and other heavy load, wet and other harsh conditions of equipment lubrication.

### ●Product Features

1. Excellent high temperature performance, with a drop point of more than 300 °C, with a higher use temperature, can reach more than 180°C.
2. Excellent thermal stability, from high temperature to room temperature, can be restored to the original structure.
3. Excellent corrosion resistance, thickener has rust resistance, so rust resistance is obvious, can be used in humid environment.
4. Excellent wear resistance and extreme pressure. Thickener is also an extreme pressure and anti-wear additive. Without the addition of EP additive, the sintering load can reach more than 500kg. It is non active and harmless to the environment. It belongs to environmental protection type grease.
5. Outstanding water resistance, specific gravity greater than water, contact with a large amount of water, its consistency does not change significantly. In wet, water drenched environment, has unparalleled performance.
6. Excellent mechanical stability, so it has a long high temperature bearing life.

### ●Formula and Recommended Dosage

Compose	Proportion	Describe
T107Z Calcium Sulfonate Additive Package	95.60%	Calcium Sulfonate
Water	4.4%	Auxiliary conversion agent

The consistency of the grease prepared by changing the ratio is generally about No.3. Customers can adjust the consistency of the grease according to the working condition and the grease supply mode, carry out boron hydroxyl compound, and add additives such as antioxidant, preservative, extreme pressure agent and solid filler.

### ●Process Describe

1. Clean the closed pressure kettle and clean it with base oil for three times.
2. The additive package and water is added into the closed pressure kettle according to the proportion, the pressure kettle is sealed, and the stirring is started.
3. Slowly heat the material to 88-94 °C, stir and mix for 3 hours, and detect the product by infrared spectroscopy until amorphous calcium sulfonate is completely transformed into crystalline calcium sulfonate.
4. Open the pressure relief valve and heat up to 140-150 °C to dehydrate 2 hours.



5. Slowly add the blended oil to mix the consistency of the grease.
6. Cool to 90-100 °C and add the required additives.

**•Product Quality Characteristics & Test Method**

Item	Typical Value	Test Method
Drop point, °C	>300	GB/ T3498
Steel mesh oil separation(100°C,24h),%	≤1	SH/ T0324
Water-pouring (38°C,1h),%	≤1	SH/ T0109
Corrosion resistance	Passed	20-30(infra-red)
Four ball, Pd,kg	>500	SH/ T0202
WSD(40kg,1h),mm	≤0.6	SH/ T0202

**Remark:**

Grease consistency and other properties are closely related to the equipment, and have a certain dependence on the temperature control and mixing mode and speed. Please communicate with the company's technical personnel during production.