Special Oil for Precision Bearing

# 4123 Precision Bearing Lubricant for Space Applications

SINOPEC 4123 precision bearing lubricant for space applications is blended with synthetic base oil and plural highly refined additives. It is grouped into No.4123, 4123-1 and 4123-2 according to the kinematic viscosity at  $100^{\circ}$ C. It meets the requirements of US Army's MIL-L-83176.

### **Advantages**

- Excellent viscosity-temp and low temp properties, ensuring normal operation of bearing in wide temperature range
- O Low evaporation loss, good lubricity and oxidation stability, ensuring a long service life

## **Performance Specification**

The product meets the following specifications:

O GJB 2375-95

## **Applications**

- Suitable for the lubrication of oil-retaining bearing of gyro motor with high-precision and long service life used in aerospace and navigation fields; And for the lubrication of precision instruments and bearings with high working speed and long service life
  Applied temperature range: -45°C ~ 150°C
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# **Typical Properties**

| Items   | 4123 precision bearing lubricant<br>for space applications |        |        |
|---|--|--------|--------|
|   | 4123   | 4123-1 | 4123-2 |
| Kinematic viscosity (100°C), mm <sup>2</sup> /s | 19.21  | 10.33  | 15.26  |
| Viscosity index                                 | 153  | 145    | 153    |
| Flash point (open), °C                          | 264  | 259    | 263    |
| Freezing point, °C                              | -49  | -55    | -47    |
| Neutralization value, mgKOH/g                   | 0.12   | 0.20   | 0.16   |
| Evaporation loss (204°C , 6.5hrs), % (m/m)      | 3.51   | 3.86   | 3.94   |

## **Similar Foreign Products**

◎ It performs as excellent as the American KENDALL KG-80 and NYE 185C, 182, 186

## **Special Attentions**

- O Cleaning of bearing and loading of this product shall be undertaken as regulated before use
- O not mix with other lubricant resulting in performance reduction due to possible physical or chemical reactions between different oil
- O Close the cap in time after each use, keeping moisture and dust away
- Material compatibility test should be carried out when used in lubricated par in contact with non-metallic material such as rubber, plastic and paint

#### Packing

O To be packed with 250g plastic bottle or by customer