

Technical Data Sheet (TDS)

Product Name: Robot Lubricant (Precision Grease)

Product Code: SCL-57

Revision Date: 2024-09-27

1. Product Description

This high-performance lubricant is specifically designed for industrial and collaborative robots. Formulated with synthetic base oils and advanced additives, it provides superior wear protection, low torque performance, and excellent oxidation stability. It is suitable for use in precision gearboxes, servo motors, and joints of robots operating under a wide range of temperatures.

2. Typical Properties

Appearance	Light beige smooth grease
Base Oil Type	Synthetic hydrocarbon oil
Thickener	Urea-based
NLGI Grade	1
Base Oil Viscosity (40°C)	80 mm ² /s
Dropping Point	>250°C
Service Temperature Range	-40°C to +150°C

3. Key Features

- Excellent low-temperature torque characteristics
- Outstanding wear and oxidation resistance
- Compatible with plastic and elastomer components
- Low noise and high durability under continuous operation

4. Applications

Ideal for use in robotic arm joints, harmonic drive gears, precision reduction gears, and other robotic mechanisms requiring high precision and reliability.

5. Usage & Handling

Apply the lubricant using standard grease dispensing systems or manually. Ensure components are clean before application. Do not mix with other types of grease unless compatibility has been confirmed.

6. Storage

Store in a cool, dry place away from direct sunlight. Keep container tightly closed to prevent contamination. Shelf life is 36 months in unopened original packaging.