

SINOPEC Bearing Grease Product Manual

## 轴承润滑脂

中国石化润滑油有限公司 SINOPEC LUBRICANT CO., LTD.

## 公司简介

### **COMPANY INTRODUCTION**

中国石化润滑油有限公司是中国石化为适应润滑油市场国际化竞争而组建的润滑油专业公司,2014年7月1日正式揭牌运营,总部位于北京市海淀区安宁庄西路6号。

公司前身为原石油工业部所属企业,曾为"两弹一星"发射做出积极贡献。上世纪80年代初期,率先推出中国润滑油行业的第一个品牌一"长城",以航天润滑科技为独特个性,支持中国制造业发展,服务社会大众。公司成立后,传承和发扬自主创新精神,研发航天润滑核心科技,为"神舟"系列载人飞船和"嫦娥"系列探月卫星的成功发射提供润滑保障,是目前唯一的"中国航天事业战略合作伙伴"。

公司下设12个生产基地、5个区域销售中心、5个区域技术支持中心和5个省级销售分公司、3个合资公司、1个海外子公司和9个海外办事处。拥有4个产品研发机构,12个国家认可实验室,具备领先的创新研发能力和世界一流的生产设备和工艺技术,产品涵盖内燃机润滑油、工业齿轮油、液压油、润滑脂、防冻液、刹车液、金属加工液、船用油及润滑油添加剂等21大类2000多个品种,广泛应用于航空航天、汽车、机械、冶金、矿采、石油化工、电子等领域,质量达到国际标准组织(ISO)、美国石油学会(API)、欧洲汽车制造商协会(ACEA)等标准的要求。

公司以"高科技、高品质、国际化"为品牌发展目标,境内推广"长城"品牌,境外推广"SINOPEC"品牌。长城润滑油多年保持国内润滑油行业第一品牌位置,品牌价值在行业内居领先地位。公司以"SINOPEC"品牌推进国际市场开发,已在东南亚、澳洲、欧洲、南美洲、非洲等50多个国家和地区设有经销网络;在新加坡、阿联酋、美国和南非等国家的主要港口设有船用油供应网点。2013年7月,位于新加坡裕廊工业区的润滑油脂生产基地正式投产,实现了产品和技术的同步输出。

公司建立了以满足顾客需要为核心的企业经营理念,通过ISO/TS16949及HSE管理体系认证;致力于发展润滑油事业,积极参与国际化竞争,以建设世界一流润滑油公司为目标,努力寻求与相关行业建立长期合作伙伴关系,共同发展和进步。



Sinopec Lubricant Co.,Ltd.Inaugurated on July 1st, 2014 in Beijing, is the largest high-tier lubricant manufacturer and marketer in China with a production capacity of over 1.46million tons of packaged lubricants per year. With 5 regional sales center across China, many more sales subsidiaries all over the world, 11 lube oil & grease blending and manufacturing branches domestic and 1 branch company in Singapore, as well as two independent R&D Centers in Beijing and Shanghai, It integrates the function of lubricant manufacturing, research, storage, transportation, sales and service.

Equipped with world-class automatic blending and packaging production line, Sinopec Lubricant Co.,Ltd. provide over 700 kinds of lube oils and greases in all 20 categories including crankcase oil, industrial gear oil, hydraulic oil, greases, anti-coolant, brake fluid, metal working fluid, marine oil and additives, etc., which are widely used in the fields of aviation, space flight, automobile, machinery, metallurgy, mining, petrochemical engineering, electronics, etc. As one of China Aviation Partners, Sinopec Lubricant Co., Ltd. is devoted to providing lubrication service for Shenzhou series manned space flight and Chang' e series lunar probe satellite, making great contributions to the development of China aviation and space flight causes.

With high-quality raw material and high-tech formulations evaluated by strict engine and bench tests, our products fully meet national standards, as well as other requirements of special specification standards of ISO, API, etc. With stable product quality, the company has completed ISO16949 and HSE management system certification.R&D institutes in Beijing, Shanghai and Chongqing all have "National Laboratory" certificates, and can undertake application research projects of both national and ministerial level, independently formulating various lubricant products to meet special market requirements under the technological support of RIPP (Research Institute of Petroleum processing). Some products have got technology certificates from world famous automobile manufacturers, such as Daimler-Chrysler, VW, Mercedes-Bens, Volvo, and MAN and became the first lubricant option of some large-scale group Corporations including FAW-VW, Dongfeng Motor Corp., Shanghai GM, Shanghai VW, Chery, Baosteel Group Corp., etc. Besides, Sinopec has established its Automobile Industry Technology Center with Sinopec Lubricant Co., Ltd. as the core to serve as the platform for cooperation with the automobile industry.

In the process of development, Sinopec Lubricant Co., Ltd. has gradually nurtured its unique brand culture and strategy on international development. Insisting in building a high-tech, high-quality, international brand image, Sinopec lubricants have entered into more than 50 countries and regions such as Australia, New Zealand, Malaysia, etc. Service network of marine oil have been set up in Singapore, The Emirates, South Africa and ready to expand to Europe and America. July 2013, Singapore Lubricants&Grease production base was Officially put into operation. In 2013, the brand value of "Great wall Lubricant" boosted 23.28 billion RMB, ranked 52ed in China's most valuable brand list in 2013 and 1st in Chinese lubricant Industry.

Devoted to development of Chinese lubricant causes, Sinopec Lubricant Co., Ltd. has actively participated in international competition and made efforts in seeking long-term cooperation relationship with relative industries to achieve mutual development.

## 轴承润滑脂

#### **SINOPEC**

Bearing Grease Product Manual

## 轴承系列润滑脂的主要性能概述

产品名称	主要特点	使用温度
长城中小型电机轴承润滑脂	通用、低噪音	-20°C ∼ 120°C
长城低噪音轴承润滑脂	通用、低噪音、低振动	-20°C ~ 120°C
长城ADV轴承润滑脂	通用、低振动	-20°C ∼ 120°C
长城HSC轴承润滑脂	通用、低噪音	-30°C ~ 130°C
长城IM低噪音轴承润滑脂	低噪音	-20°C ∼ 120°C
长城HSA轴承润滑脂	低温、低振动	-40°C ~ 130°C
长城HSB低噪音轴承润滑脂	低温、低噪音	-40°C ~ 130°C
长城TSA-L低温长寿命轴承润滑脂	超低温、长寿命、低噪音	-50°C ~ 140°C
长城ASE-M轴承润滑脂	超低温、长寿命、低噪音	-50° <b>c</b> ∼ 150° <b>c</b>
长城BHP高温轴承润滑脂	高温、低噪音	-20°C ~ 150°C
长城BME大型电机轴承润滑脂	高低温、长寿命	-40°C ∼ 150°C
长城HTHS高温高速轴承润滑脂	高低温、低噪音	-40°C ~ 150°C
长城BLE轴承润滑脂	高温、长寿命、低噪音	-25°C ∼ 180°C
长城BLU-A轴承润滑脂	高温、长寿命、低噪音	-25°C ~ 180°C
BLU-N轴承润滑脂	高温、长寿命、低噪音	-35° <b>c</b> ∼ 180°C
BLU-M轴承润滑脂	高温、长寿命、低噪音	-35°C ~ 180°C
长城WTH轴承润滑脂	高低温、超长寿命、低噪音	-40°C ~ 180°C
长城WTM轴承润滑脂	高低温、耐高速、低噪音	-40°C ~ 180°C

## **Main Performance of Bearing Greases**

Product	Main performance	Temperature
Motor bearing grease	General, low noise	-20°C ~ 120°C
Low noise bearing grease	General, low noise, low vibration	-20°C ~ 120°C
ADV	General, low vibration	-20°C ~ 120°C
HSC	General, low noise	-30°C ~ 130°C
IM	Low noise	-20°C ~ 120°C
HSA	Low temperature, low vibration	-40°C ~ 130°C
HSB	Low temperature, low noise	-40°C ~ 130°C
TSA-L	Low temperature, long life, low noise	-50°C ~140°C
ASE-M	Low temperature, long life, low noise	-50°C ~ 150°C
ВНР	High temperature, low noise	-20°C ~ 150°C
вме	BME Wide temperature range, long life	-40°C ∼ 150°C
HTHS	Wide temperature range, low noise	-40°C ∼ 150°C
BLE	High temperature, long life, low noise	-25°C ~ 180°C
BLU-A	High temperature, long life, low noise	-25°C ~ 180°C
BLU-N	Wide temperature, long life, low noise	-35°C ∼ 180°C
BLU-M	Wide temperature, long life, low noise	-35°C ∼ 180°C
WTH	Wide temperature, long life, low noise	-40°C ~ 180°C
WTM	Wide temperature, high speed, low noise	-40°C ∼ 180°C

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## 中小型电机轴承润滑脂



长城牌中小型电机轴承润滑脂采用12-羟基硬脂酸锂皂稠化深度精制的矿物基础油,并加入抗氧、防锈等添加剂,经特殊工艺炼制而成。

#### 性能特点

- 稠化剂的皂纤维结构合理,分布均匀,在剪切力的作用下能保持较好的润滑脂结构特征
- 具有一定的防锈性能,能够防止轴承运转过程中的锈蚀
- 具有优良的降噪性,能有效改善轴承的振动性能

#### 技术规格

• Q/SH PRD338

#### 应用范围

- 适用于中小型电机的滚动轴承和其他较低负荷设备的滚动轴承的润滑。
- 使用温度: -20℃~120℃

项 目	中小型电机轴承润滑脂	
	2号	
工作锥入度, 0.1mm	281	239
滴点,°C	196	202
延长工作锥入度(100000次), 0.1mm	308	280
杂质,个/cm3 10μm以上 25μm以上 75μm以上	200 0 0	300 200 0
噪音值(6201轴承) 启动异音数,N 运转异音数,N	2 3	3
低温转矩(-20°C), N.m 启动 运转	0.22 0.05	0.29 0.04
防腐蚀性(52°C, 48小时)	合格	



## Small and Medium-sized Motor Bearing Grease



SINOPEC small and medium-sized motor bearing grease is thickened by lithium 12-hydroxy stearic, it is made from deeply refined mineral oil with rust and oxidation inhibitors through special technical process.

#### Characteristics

- The perfect and well distributed fiber structure of thickener makes it keeping preferable structure characteristics of grease with shear force
- Acceptable rust resistance property, can prevent bearings rust during the running process
- Excellent noise reduction performance, can improve the performance of the bearing vibration effectively

#### Technical specification

Q/SH PRD338

#### **Applications**

- It is suitable for lubricating rolling bearings of small and medium-sized motors and other low load equipments
- Applied temperature range: -20°C ~120°C

	Small and medium-sized motor bearing grease	
Items	NLGI 2	
Worked cone penetration, 0.1mm	281	239
Dropping point, °C	196	202
Prolonged cone penetration (100000 times), 0.1mm	308	280
Impurity entries/cm3 10 $\mu$ m above 25 $\mu$ m above 75 $\mu$ m above	200 0 0	300 200 0
Noise level (6201 bearing) Number of abnormal sound for starting, N Number of abnormal sound for running, N	2 3	3
Low temperature torque (-20°C),N.m Starting torque Running torque	0.22 0.05	0.29 0.04
Corrosion resistance (52°C), 48hrs)	Qualified	





## 低噪音轴承润滑脂



长城牌低噪音轴承润滑脂采用12-羟基硬脂酸锂皂稠化深度精制的矿物基础油,并加入抗氧、防锈等添加剂,经特殊工艺炼制而成。

#### 性能特点

• 稠化剂的皂纤维结构合理,分布均匀,在剪切力的作用下能保持较好的润滑脂

#### 结构特征

- 润滑脂的洁净度高,能够有效地降低轴承的振动值
- 防锈性能良好,能够防止轴承运转过程中的锈蚀
- 优良的降噪性能

#### 技术规格

Q / SH PRD337

#### 应用范围

- 适用于中小型电机的滚动轴承和其他较低负荷设备的滚动轴承的润滑
- 使用温度: -20℃~120℃

项 目	低噪音轴承润滑脂
工作锥入度,0.1mm	281
滴点, °C	196
氧化安定性(99°C, 100小时, 758kPa)压力降, kPa	30
杂质,个 / cm3 10 μ m以上 25 μ m以上 75 μ m以上	200 0 0
噪音值(620l轴承) 启动异音数,N 运转异音数,N	2 2
低温转矩(-20°C), N.m 启动 运转	0.22 0.05
防腐蚀性(52°C, 48小时)	合格



I General grease in bearing industry

# **Low Noise Bearing Grease**



SINOPEC low noise bearing grease is thickened by lithium 12-hydroxy stearic, it is made from deeply refined mineral oil with rust and oxidation inhibitors through special technical process.

#### Characteristics

- The perfect and well distributed fiber structure of thickener makes it keeping preferable structure characteristics of grease with shear force
- Adopt special production process to guarantee high degree of cleanness, effectively reduce the bearing vibration value
- Good rust and corrosion resistant property, can prevent bearings rust during the bearing running process
- Excellent noise reduction performance

#### Technical specification

Q/SH PRD337

#### **Applications**

- It is suitable for lubricating rolling bearings of small and medium-sized motor and other lower load equipments
- Applied temperature range: -20°C ~120°C

Items	Low noise bearing grease
Worked cone penetration, 0.1mm	281
Dropping point, °C	196
Oxidation stability (99°C , 100hrs, 758kPa)Pressure drop, kPa	30
Impurity entries/cm <sup>3</sup> 10 μ m above 25 μ m above 75 μ m above	200 0 0
Noise level (6201 bearing) Number of abnormal sound for starting, N Number of abnormal sound for running, N	2 2
Low temperature torque (-20°C),N.m Starting torque Running torque	0.22 0.05
Corrosion resistance (52°C), 48hrs)	Qualified





## ADV轴承润滑脂



长城牌ADV轴承润滑脂采用12-羟基脂肪酸锂皂稠化适当黏度的精制矿物油,并加入抗氧、防锈等添加剂,经特殊工艺炼制而成。

#### 性能特点

- 优异的降振动性能
- 优良的降噪性能
- 良好的防锈、防腐蚀性能

#### 技术规格

• Q/SH303 311

#### 应用范围

- 适用于一般工作环境下的小型电机的滚动轴承和其他较低负荷设备滚动轴承的润滑
- 特别适用于内径为15mm~45mm的低噪音滚动轴承的润滑
- 使用温度: -20℃~120℃

A DE P	ADV轴承润滑脂	
项 目	2号	
工作锥入度,0.1mm	283	
滴点, °C	207	
杂质,个 / cm3 10 μ m以上 25 μ m以上 75 μ m以上	400 100 0	
噪音值(6201轴承) 起动异音数,N 运转异音数,N	2 3	





## **ADV Bearing Grease**



SINOPEC ADV bearing grease is thickened by lithium 12-hydroxy stearic, it is made from deeply refined mineral oil which has proper viscosity with rust and oxidation inhibitors through special technical process.

#### Characteristics

- Excellent vibration reduction performance
- Excellent noise reduction performance
- Good rust and corrosion resistance property

#### **Technical specification**

• Q/SH303 311

#### **Applications**

- It is suitable for lubricating rolling bearings of small and medium-sized motors and other low load equipments under normal working conditions
- Particularly suitable for lubricating low noise rolling bearing with inner diameter of 15mm-45mm
- Applied temperature range:-20°C ~120°C

Items	ADV bearing grease
	NLGI 2
Worked cone penetration, 0.1mm	283
Dropping point, °C	207
Impurity entries/cm <sup>3</sup> 10 μ m above 25 μ m above 75 μ m above	400 100 0
Noise level (6201 bearing) Number of abnormal sound for starting, N Number of abnormal sound for running, N	2 3





### 轴承行业通用润滑脂

## HSC轴承润滑脂



长城牌HSC轴承润滑脂采用特殊锂皂稠化深度精制的矿物油,并加入抗氧、防锈等添加剂,经特殊工艺炼制而成。

#### 性能特点

- 与普通低噪音润滑脂相比具有更加优良的耐高温性能
- 优良的静音性能
- 优良的防漏油性能
- 与普通低噪音润滑脂相比具有更长的轴承润滑寿命

#### 应用范围

- 适用于各种电机轴承的润滑
- 适用于终身润滑的密封轴承
- 使用温度: -30℃~130℃

项 目	HSC轴承润滑脂
工作锥入度,0.1mm	
延长工作锥入度(100000~欠), 0.1mm	336
滴点, <sup>°</sup> C	196
钢网分油(100°C, 24小时), %	1.6
水淋流失量(79°C, 1小时), %	1.6
防腐蚀性(52°C, 48小时)	合格
氧化安定性(99°C ,100小时,'758kPa) 压力降,kPa	10
低温转矩(-20°C), N.m 启动力矩 运转力矩	0. 131 0. 019
腐蚀(T2铜,100°C,24小时)	合格



## **HSC Bearing Grease**



SINOPEC HSC bearing grease is thickened by specific lithium soap, it is made from deeply refined mineral oil with rust and oxidation inhibitors and other additives through special technical process.

#### Characteristics

- Excellent high temperature resistance property compared with ordinary low-noise grease
- Excellent silence performance
- Excellent anti-leakage performance
- Longer lubricating life of bearings compared with ordinary low-noise grease

#### **Applications**

- Applicable to lubricating of various kinds of motor bearings
- \* Applicable to lubricating of sealed bearings for all life
- Applied temperature range: -30°C ~130°C

Items	HSC bearing grease
Worked cone penetration, 0.1mm	
Prolonged cone penetration (100000 times), 0.1mm	336
Dropping point, °C	196
Oil separation through steel mesh (100°C , 24hrs), $\%$	1.6
Water washout (79°C , 1hr), %	1.6
Corrosion resistance (52°C, 48hrs)	Qualified
Oxidation stability (99°C , 100hrs, 758kPa) Pressure drop, kPa	10
Low temperature torque (-20°C), N.m  Starting torque  Running torque	0.131 0.010
Corrosion (T2 copper, 100°C) ,24hrs)	Qualified



## IM低噪音轴承润滑脂



长城牌IM低噪音轴承润滑脂在高清洁密封环境下,采用12-羟基脂肪酸锂皂稠化深度精制矿物基础油,并加入抗氧、防锈等添加剂,经特殊工艺炼制而成。

#### 性能特点

- 基础油黏度适中,使用温度范围内具有较好的低温流动性
- 优异的静音性能,轴承在运转过程中的异音极少
- 良好的氧化安定性和防锈性能,能够防止轴承运转过程中的锈蚀

#### 技术规格

• Q/SH303 318

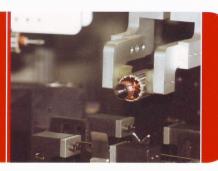
#### 应用范围

- 适用于小型和微型电机的精密滚动轴承和其他较低负荷设备的滚动轴承的润滑
- 特别推荐一般工作温度下有静音要求的工业用精密仪器、家用电器等高档精密轴承的润滑
- 不推荐在低速重负荷工况下使用
- ◆ 使用温度: -20°C ~ 120°C

项 目	IM低噪音轴承润滑脂
	2号
工作锥入度, 0.1mm	288
噪音值(620l轴承) 起动异音数,N 运转异音数,N	1 1
杂质,个/cm3 10μm以上 25μm以上 75μm以上 125μm以上	100 0 0
滴点,°C	196
防腐蚀性(52°C,48小时)	合格



## **IM Low Noise Bearing Grease**



SINOPEC IM low noise bearing grease is thickened by lithium 12-hydroxy stearic, it is made from deeply refined mineral oil with rust and oxidation inhibitors through special technical process under a high-clean sealed environment.

#### **Characteristics**

- Moderate viscosity of base oil, have better low temperature fluidity within the application temperature range
- Excellent silence performance; extremely less abnormal sound of bearings during the running process
- · Good oxidation stability and rust resistance can prevent the bearings rust during the running process

#### **Technical specification**

Q/SH303 318

#### **Applications**

- It is applicable for lubricating precision rolling bearings of miniature and small-sized motors and other low load equipments
- It is particularly recommended for the lubricating of industrial precision instruments, household appliances and high-grade precision bearings with silence requirements under ordinary working temperature
- It is not recommended to use this product under the low-speed and heavy load working conditions
- Applied temperature range:-20°C ~120°C

Items	IM low noise bearing grease
items	NLGI 2
Worked cone penetration, 0.1mm	288
Noise level (6201 bearing)  Number of abnormal sound for starting, N  Number of abnormal sound for running, N	1 1
Impurity entries/cm3 10 µ m above 25 µ m above 75 µ m above 125 µ m above	100 0 0 0
Dropping point, °C	196
Corrosion resistance (52°C, 48hrs)	Qualified



## HSA轴承润滑脂



长城牌HSA轴承润滑脂采用12-羟基脂肪酸锂皂稠化优质化学合成油和精制矿物油,并加入特殊抗氧、防锈等添加剂,经特殊工艺炼制而成。

#### 性能特点

- 采用合成油和精制矿物油为基础油,能减小低温时的机械扭矩,在-30°C以上使用时具有良好的安定性
- 润滑寿命较长,具有良好的氧化安定性及防锈特性,能够防止轴承运转过程中的锈蚀

#### 技术规格

Q/SH303 355

#### 应用范围

- 适用于较低温度下各种中小型密封轴承的长效润滑
- 不推荐低速重负荷工况下使用
- 使用温度: -40°C~130°C

TE D	HSA轴承润滑脂	
项 目	2号	
工作锥入度,0.1mm	280	
噪音值(620 轴承) 起动异音数,N 运转异音数,N	2 4	
滴点 <mark>,℃</mark>	200	
腐蚀(T2铜,100°C,24小时)	合格	
杂质,个/cm3 10 μ m以上 25 μ m以上 75 μ m以上	300 0 0	
防腐蚀性(52°C, 48小时)	合格	
低温转矩(-35°C) <mark>,N</mark> .m 启动 运转	0.22 0.03	



## **HSA Bearing Grease**



SINOPEC HSA bearing grease is thickened by lithium 12-hydroxy stearic soap, it is made from high quality synthetic oil and refined mineral oil with oxidation and rust inhibitor through special technical process.

#### **Characteristics**

- With the synthetic oil and refined mineral oil as the basis oils, this product can reduce torque under low temperature. It has excellent stability if used under the conditions of above -30°C
- Excellent oxidation stability and anti-rust performance with long lubricating life can prevent bearings rust during the running process

#### **Technical specification**

Q/SH303 355

#### **Applications**

- It is suitable for long-term lubrication of various small to medium-sized sealed bearing
- Not recommended using this product under the condition of low speed and heavy loads
- Applied temperature range: -40°C~130°C

	HSA bearing grease
Items	NLGI 2
Worked cone penetration, 0.1mm	288
Noise level (6201 bearing) Number of abnormal sound for starting, N Number of abnormal sound for running, N	2 4
Dropping point, °C	200
Corrosion (T2 copper, 100 °C,24hrs)	Qualified
Impurity entries/cm <sup>3</sup> 10 μ m above 25 μ m above 75 μ m above	300 0 0
Corrosion resistance (52°C, 48hrs)	196
Low temperature torque (-35°C),N.m  Starting torque Running torque	Qualified



## HSB低噪音轴承润滑脂



长城牌HSB低噪音轴承润滑脂采用高级脂肪酸皂稠化优质基础油,并加入特殊添加剂,经特殊工艺炼制而成。

#### 性能特点

- 优异的静音性,可以有效抑制轴承运转时的异音
- 优良的低温性能,能减小低温时的机械扭矩
- 优良的防锈性能,能够防止轴承运转过程中的锈蚀

#### 技术规格

Q/SH PRD343

#### 应用范围

- 适用于各类级别的中小型及微型低噪音轴承的低温润滑,同时可满足其他普通中小型电机轴承的润滑和防护
- 不推荐在低速重负荷下使用
- 使用温度: -40℃~130℃

项 目	HSB低噪音轴承润滑脂
工作锥入度,0.1mm	270
滴点,°C	200
钢网分油(100°C, 24小时), %	1.0
水淋流失量(38°C, 1小时), %	4
腐蚀(T2铜片,100°C,24小时)	合格
漏失量(104°C,6小时),g	0.3
氧化安定性(99℃, 100小时, 758kPa)压力降, kPa	38
防腐蚀性(52°C, 48小时)	合格
低温转矩(-35˚C),N.m 启动力矩 运转力矩	0.19 0.02
杂质 (显微镜法),个cm3 10 μ m以上 25 μ m以上 75 μ m以上	80 0 0
噪音值(6201轴承) 启动异音数,N 运转异音数,N	1



## **HSB Low Noise Bearing Grease**



SINOPEC HSB low noise bearing grease is thickened by lithium fatty acid, it is made from high quality base oil through special technical process.

#### Characteristics

- Excellent silence performance can effectively inhibit the abnormal noise when the bearings are running
- Excellent low temperature properties can reduce the mechanical torque at low temperatures
- · Excellent rust resistance performance can prevent the rust and corrosion of bearings during the running process

#### **Technical specification**

Q/SH PRD343

#### **Applications**

- It is suitable for lubricating various types of miniature, small and medium-sized low noise bearings at low temperatures, and also suitable for the lubrication and protection of other ordinary small and medium-sized motor bearings
- Not recommended using this product under the condition of low speed and heavy loads
- Applied temperature range: -40°C ~130°C

Items	HSB low noise bearing grease
Worked cone penetration, 0.1mm	270
Dropping point, °C	200
Oil separation through steel mesh (100°C, 24hrs)	1.0
Water washout (38, 1hr)	4
Corrosion (T2 copper sheet, 100°C, 24hrs)	Qualified
Leakage (104°C,6hrs), g	0.3
Oxidation stability (99°C, 100hrs, 758kPa) Pressure drop, kPa	38
Corrosion resistance (52°C, 48hrs)	Qualified
Low temperature torque (-35°C),N.m	0.19
Starting torque Running torque	0.02
Impurity (microscope method), entries/cm <sup>3</sup>	80
10 µ m above	0
25 μ m above 75 μ m above	0
Noise level (6201 bearing)	1
Number of abnormal sound for starting, N Number of abnormal sound for running, N	1



## TSA-L低温长寿命轴承润滑脂



长城牌TSA-L低温长寿命轴承润滑脂在高清洁环境下采用高级脂肪酸皂稠化优质化学合成油,并加入特殊添加剂,经特殊工艺炼制而成。

#### 性能特点

- 优异的超低温性能,能显著减小较低温度下的机械扭矩
- 较高的清洁度,杂质含量低,可以抑制轴承运转时的异音
- 良好的氧化安定性及防锈特性,可以满足电机设备的终身润滑

#### 技术规格

O/SH PRD344

#### 应用范围

- 适用于各种中小型电机,工业精密仪器、办公及家用电器等滚动轴承的润滑
- 特别适用于微小型的低噪音精密轴承的终身润滑
- 不推荐在低速重负荷下使用
- ◆ 使用温度: -50°C ~ 140°C

项目	TSA -L低温长寿命轴承润滑脂
工作锥入度,0.1mm	275
滴点, °C	198
噪音值(6201轴承) 启动异音数,N 运转异音数,N	1 1
杂质(显微镜法),个/cm3 10 μ m以上 25 μ m以上 75 μ m以上 125 μ m以上	200 0 0 0
低温转矩(-40°C),N.m 启动力矩 运转力矩	0.24 0.09
轴承寿命(125°C),小时	1000



Il Low temperature grease in bearing industry

## TSA-L Low-temperature and Long-life Bearing Grease



SINOPEC TSA-L low-temperature and long-life bearing grease is thickened by higher fatty acid soap, it is made from chemically synthetic oil with special additive through special technical process under high-clean environment.

#### Characteristics

- Excellent ultra-low temperature property can substantially reduce the mechanical torque at low temperature
- High degree of cleanness and low impurity content can inhibit the abnormal sound when running of bearings
- Excellent oxidation stability and anti-rust property can meet the life-long lubricating of the electric equipments

#### **Technical specification**

Q/SH PRD344

#### **Applications**

- It is applicable for the lubricating of various rolling bearings of small and medium-sized motors, industrial precision instruments and office and household electrical appliances, etc
- Particularly applicable for the life-long lubrication of the miniature-type low noise precision bearings
- Not recommended using this product under low speed and heavy load conditions
- Applied temperature range: -50°C ~140°C

Items	TSA-L low temperature and long-life bearing grease
Worked cone penetration, 0.1mm	275
Dropping point, °C	198
Noise level (6201 bearing) Number of abnormal sound for starting, N Number of abnormal sound for running, N	1 1
Impurity (microscope method), entries/cm3 10 µ m above 25 µ m above 75 µ m above 125 µ m above	200 0 0 0
Low temperature torque (-40°C , N.m Starting torque Running torque	0.24 0.09
Bearing life (125°C), hrs	1000





### 轴承行业低温润滑脂

## ASE-M轴承润滑脂



长城牌ASE-M轴承润滑脂采用锂皂稠化酯类油,并加入抗氧、防锈等添加剂,经特殊工艺炼制而成。

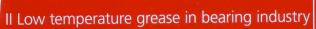
#### 性能特点

- 优良的耐高温性能
- 优良的低温启动性能
- 优良的静音性能
- 优良的防锈性能

#### 应用范围

- 适用于各种电机轴承的润滑
- 使用温度: -50°C~150°C

项目	ASE—M轴承润滑脂
工作锥入度,0.1mm	268
滴点, °C	204
钢网分油(100°C, 24小时), %	1.8
水淋流失量(79°C, 1小时), %	1.3
腐蚀(T2铜,100°C,24小时)	合格
蒸发损失(99°C, 22小时), %(质量分数)	0. 4
防腐蚀性(52°C, 48小时)	合格
氧化安定性(99°C ,100小时,758kPa) 压力降,kPa	8
低温转矩(-40°C), N.m 启动力矩 运转力转	0. 220 0. 032
杂质,个/cm3 10 μ m以上 25 μ m以上 75 μ m以上	80 0 0



## **ASE-M Bearing Grease**



SINOPEC ASE-M bearing grease is thickened by lithium soap, it is made from ester oil with rust and oxidation inhibitors through special technical process.

#### Characteristics

- Excellent high temperature resistance performance
- Excellent low temperature starting performance
- Excellent silence performance
- Excellent anti-rusting performance

#### **Applications**

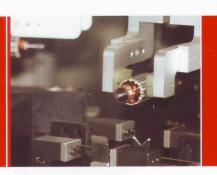
- Applicable for lubricating of various motor bearings
- Applied temperature range:-50°C~150°C

Items	TSA-L low temperature and long-life bearing grease
Worked cone penetration, 0.1mm	268
Dropping point, °C	204
Oil separation through steel mesh (100°C, 24hrs), %	1.8
Water washout (79°C 1hr), °C	1.3
Corrosion (T <sub>2</sub> copper,100°C,24hrs)	Qualified
Evaporation loss (99°C,22hrs), % (mass fraction)	0.4
Corrosion resistance (52°C,48hrs)	Qualified
Oxidation stability (99°C , 100hrs, 758kPa) Pressure drop, kPa	8
Low temperature torque (-40°C), N.m Starting torque Running torque	0.220 0.032
Impurity, entries/cm3 10 μ m above 25 μ m above 75 μ m above	80 0 0





## BHP高温轴承润滑脂



长城牌BHP高温轴承润滑脂采用高温稠化剂稠化优质矿物油,并加入多效极压剂,经特殊工艺炼制而成。

#### 性能特点

- 较高的滴点,能满足150°C高温条件下的润滑要求
- 添加高质量的抗磨添加剂,可满足一般程度的极压抗磨要求

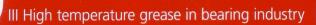
#### 技术规格

• Q/SH303 317

#### 应用范围

- 适用于高温环境下中小型精密轴承及微型轴承的润滑
- 特别适用于低噪音密封轴承的润滑和高温电机轴承及各类水泵轴承的润滑,也可满足其它负荷滚动轴承• 高温下的 润滑防护
- 使用温度: -20℃~150℃

	BHP 高温轴承润滑脂
项目	2 号
工作锥入度,0.1mm	278
噪音值(6201轴承) 起动异音数,N 运转异音数,N	2 2
滴点,°C	321
极压性能(四球机法)PB值,N	667
氧化安定性(99°C ,100小时,758kPa) 压力降,kPa	16



# BHP High-temperature Bearing Grease



SINOPEC BHP high-temperature bearing grease is thickened by high-temperature thickener, it is made from mineral oil with multipurpose extreme pressure additives technical process.

#### **Characteristics**

- Higher dropping point and can meet the lubricating requirements up to 150°C
- With high quality anti-wear additives, this product can satisfy ordinary level of extreme pressure

#### **Technical specification**

Q/SH303 317

#### **Applications**

- It is applicable for the lubricating of small and medium-sized precision bearing and miniature— type bearings under high temperature environment
- Particularly applicable for the lubricating of low noise sealed bearings and high temperature motor bearing as well as
  various types of water pump bearings, also used for lubricating and protection of other rolling bearings under high
  temperature environment
- Applied temperature range: -20°C ~150°C

ltems	BHP high-temperature bearing grease	
	NLGI 2	
Worked cone penetration, 0.1mm	278	
Noise level (6201 bearing) Number of abnormal sound for starting, N Number of abnormal sound for running, N	2 2	
Dropping point,*C	321	
EP performance (four ball machine method), PB value, N	667	
Oxidation stability (99°C , 100hrs, 758kPa) Pressure drop, kPa	16	





## BLE轴承润滑脂



长城牌BLE轴承润滑脂采用有机稠化剂稠化矿物油,并加入抗氧、防锈等高性能添加剂,经特殊工艺炼制而成。

#### 性能特点

- 耐高温和使用长寿命
- 优异的降噪音性能
- 良好的胶体安定性和防锈性能

#### 技术规格

• Q/SH303 433

#### 应用范围

- 适用于DN值在400000以内的各种高速轴承的长效润滑
- 适用于各种中小型低噪音密封轴承,尤其适用于低噪音深沟球轴承
- 适用于水蒸汽或潮湿的环境下能够有效地保护轴承避免生锈
- 适用于高温电机、高温风扇等轴承的润滑要求
- 推荐用于长寿命密封轴承的润滑
- ◆ 使用温度: -25°C ~200°C

项 目	BLE轴承润滑脂
工作锥入度, 0. 1mm	280
滴点, °C	260
钢网分油(100°C, 24小时), %	0.7
水淋流失量(79°C, 1小时), %	0.5
腐蚀(T2铜片,100°C,24小时)	合格
高温轴承寿命(177°C),小时	178.5
防腐蚀性(52°C, 48小时)	合格
低温转矩(-20°C),N.m 启动力矩 运转力矩	0.42 0.05



## **BLE Bearing Grease**



SINOPEC BLE bearing grease is thickened by organic thickener, it is made from mineral oil with rust and oxidation inhibitor through special technical process.

#### **Characteristics**

- High temperature resistance and long-life performance
- Excellent noise reduction performance
- Good colloidal stability and anti-rust performance

#### **Technical specification**

Q/SH 303 433

#### **Applications**

- It is applicable for long life lubricating of various high speed bearings within DN value 400000
- Applied in various small and medium-sized low noise sealed bearings, particularly applied in low noise deep groove hall bearings.
- Applicable to the water vapor or humid environments, can effectively protect the bearings from rusting
- Applicable for the lubricating of bearings of high-temperature motors and high-temperature bearings, etc
- Recommended for lubricating of long life sealed bearings
- Applied temperature range: -25°C ~200°C

Items	BHP high-temperature bearing grease
Worked cone penetration, 0.1mm	280
Dropping point, °C	260
Oil separation through steel mesh (100°C , 24hrs), $\%$	0.7
Water leaching (79°C, 1hr), %	0.5
Corrosion (T2 copper sheet , 100°C , 24hrs)	Qualified
Life of high-temperature bearing (177°C), hrs	178.5
Corrosion resistance (52°C,48hrs)	Qualified
Low temperature torque (-20°C),N.m Starting torque Running torque	0.42 0.05





## BLU-A轴承润滑脂



长城牌BLU-A轴承润滑脂采用有机稠化剂稠化精制矿物油,并加入抗氧、防锈等添加剂,经特殊工艺炼制而成。

#### 性能特点

- 耐高温且在高温下使用寿命长
- 优异的静音性能,尤其用于内径≥30mm的深沟球轴承时能够显著降低轴承的噪音
- 良好的胶体安定性和防锈性能

#### 技术规格

• Q/SH303 514

#### 应用范围

- 适用于各种中小型低噪音密封轴承,尤其适用于低噪音深沟球轴承
- 应用于内径≥30mm的深沟球轴承,其振动值较普通低噪音润滑脂低2dB~4dB
- 在水蒸汽或潮湿的环境下能够有效地保护轴承避免生锈
- 可满足高温电机、高温风扇等轴承的润滑要求
- 不推荐在低速重负荷下使用
- 使用温度: -25°C ~ 180°C

项目	BLU -A轴承润滑脂
工作锥入度, 0.1mm	275
滴点,°C	280
低温转矩(-20°C),N.m 启动力矩 运转力矩	0.2l 0.02
噪音值(6308轴承) 启动异音数,N	0
启动振动值,dB	37
运转异音数,N	0
运转振动值, <b>dB</b> 腐蚀(T₂铜片,100°C,24小时)	38
钢网分油(100°C, 24小时), %	1.0
轴承寿命(177°C),小时	150





## **BLU-A Bearing Grease**



SINOPEC BLU-A bearing grease is thickened by organic thickener, it is made from refined mineral oil with rust and oxidation inhibitors and other additives through special technical process.

#### Characteristics

- High temperature resistance and long life performance under high temperature conditions
- Excellent silence performance, particularly significantly reduce the noise of bearings when used in deep groove ball bearings with inner diameter ≥30mm
- Good colloid stability and anti-rusting performance

#### **Technical specification**

Q/SH303 514

#### **Applications**

- It is applicable for various types of small and medium-sized low noise sealed bearings, particularly applicable for low noise deep groove ball bearings
- Applied in the deep groove ball bearings with inner diameter ≥30mm, its vibration value is 2dB~4dB lower than that of the ordinary low noise grease
- Be able to effectively protect the bearings from rust under the water vapor or humid environments
- Be able to meet the requirements for lubricating bearings of high-temperature motors and high-temperature fans
- Not recommended using this product under the low speed and heavy load conditions
- Applied temperature range: -25°C ~180°C

Items	BLU-A bearing grease
Worked cone penetration, 0.1mm	275
Dropping point, °C	280
Low temperature torque (-20°C), N.m Starting torque Running torque	0.21 0.02
Noise level (6308 bearing)  Number of abnormal sound for starting, N  Starting vibration value, dB  Number of abnormal sound for running, N  Running vibration value, dB	0 37 0 38
Corrosion (T2 copper, 100°C, 24hrs)	Qualified
Oil separation through steel mesh (100°C, 24hrs), %	10
Bearing life (177°C), hrs	150





## BLU-N轴承润滑脂



长城BLU-N轴承润滑脂是由聚脲稠化剂、精制矿物油和合成油、及严格筛选的添加剂经特殊工艺制备而成的低噪音长寿命轴承润滑脂。

#### 性能特点

- 耐高温和使用长寿命性能
- 优异的降噪音性能
- 良好的胶体安定性和防锈性能

#### 技术规格

SHRHYXY5178

#### 应用范围

- 适用于DN值在600000以内的各种高速轴承的长效润滑
- 适用于各种中小型低噪音密封轴承,尤其适用于低噪音深沟球轴承
- 适用于水蒸汽或潮湿的环境下能够有效地保护轴承避免生锈
- 可满足汽车涨紧轮、水泵、电磁离合器、工业风扇等轴承的润滑要求
- 推荐用于长寿命密封轴承的润滑
- ◆ 适用温度: -35°C~180°C

分析项目	BLU-N 2号 BLU-	-N T2号	试验方法
外观	白色至浅黄色均匀油	自膏	目测
使用温度范围	-35 ~ 180°C		
稠化剂	聚脲		
基础油	矿物油+合成油		
基础油粘度 (40°C) /mm2/s	80		ASTM D445
工作锥入度/0.1mm	280	260	ASTM D217
滴点/°C	270	270	GB/T 3498
钢网分油(100°C, 24h)/质量%	0.5	0.4	ASTM D6184
水淋流失量(79°C, 1h)/质量%	2	2	ASTM D1264
腐蚀(T2铜, 100°C, 24h)	合格	合格	JIS K 2220.9
防腐蚀性(52°C, 48h)	合格	合格	ASTM D1743
低温转矩    启动	0.514	0.551	ASTM D1478
(-35°C) /N·m 运转	0.054	0.056	A31101 D1470
轴承寿命 (177℃) /h	341	382	ASTM D3336

III High temperature grease in bearing industry

## **BLU-N Bearing Grease**



BLU-N is made up of polyurea thickener thickening, refined mineral oil & synthetic base oil and stricter screening additives with special processes, has, excellent high temperature performance and it also can effectively prevent bearings from rusting in humid and steaming environment. BLU-N is suitable for long life and low noise seal bearing (such as general electrical fan motors, water pump, air-conditioning electromagnetic clutch and other industrial motors.).

#### **Properties**

- Excellent high temperature performance and long service life;
- Excellent noise reduction performance;
- Effectively prevent bearings from rusting in humid and steaming environment.

#### **Technical Specifications**

SHRHYXY5178

#### **Application**

- Suitable for lubricating bearings the DN value of 800,000 under the conditions of the high speed;
- It is suitable for high speed bearing and precision bearing and other textile machine;
- Protect bearings from rusting at high temperature and moisture condition;
- Especially suitable for tensioning wheel bearing, water pump bearing, electromagnetic clutch beating, industrial fans bearing, etc.
- It is recommended for long life sealed bearing;
- Application temperature rang: -35°C ~ 180°C.

Product data	BLU-N BLU-N NO. 2	NO. T2	Test method
Appearance	White smooth bu	ittery	Visual
Service temperature rang	-35∼180°C		<del>-</del>
Chemical composition, thickener	Polyurea		<del></del>
Chemical composition, type of oil	mineral oil+ synthe	etic oil	
Kinematic viscosity of the base oil (40°C), mm2/s	80		GB/T 265
Worked penetration, 0.1mm	280	260	GB/T 269
Dropping point, °C	270	270	GB/T 4929
Oil separation (100°C, 24h), mass%	0.5	0.4	NB/SH/T 0324
Water washout (79°C,1 h), mass%	2	2	SH/T 0109
Copper strip corrosion (T2,100°C,24h)	pass	pass	GB/T 7326
Corrosion preventive properties (52°C, 48h)	pass	pass	GB/T 5018
Low-temperature torque (-35°C) , N•m  Running	0.514 0.054	0.551 0.056	SH/T 0338
CRC bearing lubrication life(177°C) h	341 382	2	ASTM D 3336



## 轴承行业高温润滑脂

## BLU-M轴承润滑脂



长城BLU-M轴承润滑脂是由聚脲稠化剂、精制矿物油和严格筛选的添加剂经特殊工艺制备而成的低噪音长寿命轴承润滑脂。

#### 性能特点

- 耐高温和使用长寿命性能
- 优异的降噪音性能
- 良好的胶体安定性和防锈性能

#### 技术规格

SHRHYXY5203

#### 应用范围

- 适用于DN值在600000以内的各种高速轴承的长效润滑
- 适用于6201-6205低噪音密封轴承的润滑和防护
- 适用于水蒸汽或潮湿的环境下能够有效地保护轴承避免生锈
- ◆ 适用温度: -35°C ~180°C

分析项目	BLU-M 2号	BLU-M T2号	试验方法
外观	白色至浅黄	色均匀油膏	目测
使用温度范围	-35~	180℃	
稠化剂	聚	脲	<del></del>
基础油	矿物油	+合成油	
基础油粘度(40℃)/mm²/s	8	30	ASTM D445
工作锥入度 /0.1mm	283	260	ASTM D217
滴点/℃	273	270	GB/T 3498
钢网分油(100℃, 24h)/%	0.2	0.4	ASTM D6184
水淋流失量(79℃, 1h)/%	1	2	ASTM D1264
腐蚀(T2铜, 100℃, 24h)	合格	合格	JIS K 2220.9
防腐蚀性(52℃, 48h)	合格	合格	ASTM D1743
低温转矩(-35℃)/N·m 启动力矩运转力矩	0.420	0.50 0.048	ASTM D1478



## **BLU-M Bearing Grease**



BLU-M is made up of polyurea thickener thickening, refined mineral oil and stricter screening additives with special processes. BLU-M has excellent noise reduction performance, especially for 6201 ~ 6205 bearings, it can significantly reduce the vibrations, and it can effectively prevent bearings from rusting in humid and steaming environment. BLU-M is suitable for small size, long life, low noise bearings.

#### **Properties**

- Excellent high temperature performance and long service life;
- Excellent noise reduction performance;
- Effectively prevent bearings from rusting in humid and steaming environment.

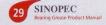
#### **Technical Specifications**

SHRHYXY5203

#### **Application**

- Suitable for lubricating bearings the DN value of 800,000 under the conditions of the high speed;
- Protect bearings from rusting at high temperature and moisture condition;
- Especially suitable for 6201-6205 bearing.
- Application temperature rang: -35°C ~ 180°C.

Product data	BLU-M NO. 2	BLU-M NO. T2	Test method
Appearance	white smo	ooth buttery	Visual
Service temperature rang	-35~	-180℃	
Chemical composition, thickener	pol	yurea	
Chemical composition, type of oil	miner	ral oil	
Kinematic viscosity of the base oil (40°C), $mm2/s$		80	GB/T 265
Worked penetration, 0.1mm	283	260	GB/T 269
Dropping point , °C	273	270	GB/T 4929
0il separation (100°C, 24h), mass%	0.2	0.4	NB/SH/T 0324
Water washout (79°C, 1 h), mass%	1	2	SH/T 0109
Copper strip corrosion (T2, 100℃, 24h)	pass	pass	GB/T 7326
Corrosion preventive properties (52°C, 48h)	pass	pass	GB/T 5018
Low-temperature torque Starting (-35°C), N•m Running	0.420 0.044	0.50 0.048	ASTM D1478





### 轴承行业宽温润滑脂

## BME大型电机轴承润滑脂



长城牌BME大型电机轴承润滑脂采用复合锂皂稠化剂稠化深度精制矿物油和合成油,并加入抗氧、防锈、极压等添加 剂, 经特殊工艺炼制而成。

#### 性能特点

- 突出的高低温性能,高温条件下使用寿命长,低温启动性能好
- 良好的剪切安定性,确保长期使用中不甩油
- 优良的极压抗磨性能,确保电机在重负荷工作情况下的安全运转

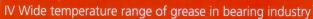
#### 技术规格

Q/SH303 298

#### 应用范围

- 适用于大型电机轴承及发电机轴承的润滑
- 使用温度: -40°C~150°C

项目	BME大型电机轴承润滑脂
工作锥入度,0.1mm	281
钢网分油(100°C, 24小时), %	2.0
滴点,°c	314
极压性能(四球机法)PB值,N	834
低温转矩(-20°C),N.m 起动转矩 运转转矩	0.26 0.03
抗磨性能(四球机法),mm (392N,60mim)	0.45
防腐蚀性(52°C, 48小时)	合格
轴承寿命(150°C),小时	80



# BME Large-scale Motor Bearing Grease



SINOPEC BME large-scale motor bearing grease is thickened by lithium complex thickener, it is made from deeply refined mineral oil and synthetic oil with rust and oxidation inhibitors, extreme pressure and other additives through special technical process.

#### Characteristics

- Outstanding high and low temperature performance, with long service life under high temperature conditions and good low-temperature starting performance
- Excellent shear stability ensures no oil spraying in the long-term of service
- Good extreme-pressure and anti-wear performance ensures safe running of motor under heavy load working conditions

#### **Technical specification**

• Q/SH303 298

#### **Applications**

- · Applicable for the lubricating of bearings of large scale motor and power generator
- Applied temperature range: -40°C ~150°C

Items	BME large-scale motor bearing grease
Worked cone penetration, 0.1mm	281
Oil separation through steel mesh (100°C , 24hrs), $\%$	2.0
Dropping point, °C	314
Extreme pressure performance (Four ball machine method), PB value, N	834
Low temperature torque (-20°C), N.m Starting torque Running torque	0.26 0.03
Anti-wear performance (Four ball machine method), mm (392N, 60min)	0.45
Corrosion resistance (52°C, 48hrs)	Qualified
Bearing life (150°C), hrs	80





#### 轴承行业宽温润滑脂

## HTHS高温高速轴承润滑脂



长城牌HTHS高温高速轴承润滑脂采用复合锂皂稠化剂稠化高品质精制矿物油和合成油,并加入抗氧剂、防锈剂、极压 抗磨等添加剂, 经特殊工艺炼制而成。

#### 性能特点

- 较高的滴点,能满足150℃高温条件下的润滑要求
- 良好的低温启动性能
- 添加高质量的抗磨添加剂,可满足一般负荷的极压抗磨要求
- 运转部位摩擦热发生量低,可满足中高速轴承的润滑要求

#### 技术规格

Q/SH PRD342

#### 应用范围

- 适用于高低温环境下中小型精密轴承及微型轴承的润滑
- 特别适用于高温低噪音密封轴承的润滑,同时可满足其它高低温中小型电机和
- 高温一般负荷滚动轴承的润滑和防护
- ◆ 使用温度: -40°C~150°C

项 目	HTHS高温高速轴承润滑脂
工作锥入度, 0. 1mm	278
杂质,个/cm3	
10 µ m以上	500
25 μ m以上	0
75 µ m以上	0
极压性能(四球机法)PB值,N	667
低温转矩(-30℃), N.m	
起动转矩	0.25
运转转矩	0.08
防腐蚀性(52°C, 48小时)	合格
轴承寿命(160°C),小时	51.2
滴点, °C	321
噪音值(6201轴承)	
启动异音数,N	2
运转异音数,N	2



### HTHS High-temperatureand High-speed Bearing Grease



SINOPEC HTHS high-temperature and high-speed bearing grease is thickened by lithium complex soap thickener, it is made from deeply refined mineral oil and synthetic oil with antioxidant, EP and anti-wear additive and corrosion inhibitors through special technical process.

#### **Characteristics**

- High dropping point and can meet the lubricating requirement up to 150°C
- Good low-temperature stating performance
- · Add high quality anti-wear additives, can meet the extreme-pressure and anti-wear requirement of ordinary load
- Low friction heat generation at the running part; can meet the lubricating requirements of high and medium speed bearings

#### **Technical specification**

Q/SH PRD342

#### **Applications**

- It is suitable for lubrication of small and medium-sized precision bearings and miniaturetype bearings under high and low temperature conditions
- Particularly suitable for the lubricating of high temperature and low noise sealed bearings, also for the lubricating and
  protection of small and medium-sized electric motor of high and low temperature and ordinary load rolling bearings
  at high temperature
- Applied temperature range: -40°C ~150°C

Items	HTHS high temperature and highspeed bearing grease
Worked cone penetration, 0.1mm	278
Impurity, entries/cm <sup>3</sup> 10 μ m above 25 μ m above 75 μ m above	500 0 0
Extreme pressure performance (Four ball machine method), PBvalue, N	667
Low temperature torque (-30°C), N.m Starting torque Running torque	0.25 0.08
Corrosion resistance (52°C, 48hrs)	Qualified
Bearing life (160°C), hrs	51.2
Dropping point, °C	321
Noise level (6201 bearing)  Number of abnormal sound for starting, N  Number of abnormal sound for running, N	2 2



### 轴承行业宽温润滑脂

## WTH轴承润滑脂



长城牌WTH轴承润滑脂采用聚脲稠化剂稠化合成油,并加入抗氧、防锈、抗磨等添加剂,经特殊工艺炼制而成。

#### 性能特点

- 优良的耐高低温性能
- 优良的耐高速性能
- 优良的静音性能
- 优良的润滑性能
- 超长的轴承寿命
- 良好的抗水、防锈性能

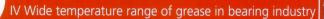
#### 技术规格

• Q/SH303 515

#### 应用范围

- 适用于DN值在700000以内的各种高速轴承的长效润滑
- 适用于各种电机、风扇、汽车空调电磁离合器、发动机张紧轮、交流发电机、汽车水泵、家用电器及办• 公等设备中的滚动轴承
- 适用于各种静音高温电机轴承, 高温风扇轴承
- 适用于长寿命以及终身润滑的密封轴承
- 使用温度: -40°C~180°C

WTH轴承润滑脂
225
280
0. 5
0. 4
760
合格
0.35 0.05 合格
5
2 2



## **WTH Bearing Grease**



SINOPEC WTH bearing grease is thickened by polyurea thickener, it is made from synthetic oil with antioxidant, antiwear additive and corrosion inhibitors through special technical process.

#### Characteristics

- Excellent high and low temperature resistance property
- Excellent high speed resistance property
- Excellent silence property
- Excellent lubricating performance
- Super-long bearing life
- · Good waterproof and anti-rust property

#### **Technical specification**

• Q/SH303 515

#### **Applications**

- Suitable for long life lubricating of various high speed bearings within DN value 700000
- Applied in the rolling bearings of various electric motors, fans, auto air conditioner magnetic clutch, engine tension wheel, AC generator, water pump, household appliances and office equipments
- Applicable for the bearings of various types of silence high-temperature bearings and hightemperature fans
- Applicable for long-life and life time lubricating of the sealed bearings
- Applied temperature range: -40°C ~180°C

Items	WTH bearing grease
Worked cone penetration, 0.1mm	225
Dropping point, °C	280
Oil separation through steel mesh (100°C, 24hrs), %	0.5
Water washout (79°C , 1hr), %	0.4
Bearing life (177°C), hrs	760
Bearing anti-rusting (52°C, 48hrs)	Qualified
Low temperature torque (-40°C), N.m Starting torque Running torque	0.35 0.05
Corrosion (T2 copper, 100°C, 24hrs)	Qualified
Oil separation through centrifugation (150 $^{\circ}$ C), $\%$	5
Noise level (6201 bearing)  Number of abnormal sound for starting, N  Number of abnormal sound for running, N	2 2



## WTM轴承润滑脂



长城牌WTM轴承润滑脂采用聚脲稠化剂稠化合成烃类油,并加入抗氧、防锈等添加剂,经特殊工艺炼制而成。

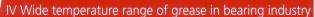
#### 性能特点

- 优良的耐高、低温性能
- 优良的耐高速及低扭矩特性
- 优良的静音性能
- 优良的高温润滑寿命

#### 应用范围

- 适用于各种高速轴承的润滑及机床高速主轴的润滑
- 适用于高速吸尘器电机轴承、洗衣机串级电机轴承等家电用轴承
- 适用于工业及汽车用各种高温高速电机轴承
- 使用温度: -40°C ~ 180°C

项 目	WTM轴承润滑脂
工作锥入度,0.1mm	255
滴点,℃	270
钢网分油(100°C, 24小时), %	0.65
轴承防锈(52°C, 48小时), 级	1 1 2 2 1
低温转矩(-40°C),N.m 启动力矩 运转力转	0.35 0.05
防腐蚀性(T2铜, 100°C, 24小时)	合格
噪音值(6201轴承) 启动异音数 运转异音数	2 2



## **WTM Bearing Grease**



SINOPEC WTM bearing grease is thickened by polyurea thickener, it is made from synthetic hydrocarbon-type oil with antioxidant and corrosion inhibitors through special technical process.

#### Characteristics

- · Excellent high and low temperature resistance property
- Excellent high speed resistance and low torque property
- Excellent silence property
- · Excellent high-temperature lubricating life

#### **Applications**

- · Applied to the lubricating of various types of high-speed bearings and high speed main axle of lathe
- Applied to the motor bearing of high–speed vacuum cleaner and cascade motor bearing of laundry machine and other household electrical appliances
- Applied to various types of high-temperature and high-speed electric motor bearings for industry and automobiles
- Applied temperature range: -40°C ~180°C

Items	WTH bearing grease
Worked cone penetration, 0.1mm	255
Dropping point, °C	270
Oil separation through steel mesh (100°C, 24hrs), $\%$	0.65
Bearing corrosion resistance (52°C, 48hrs), grade	4° - 1. 1. 30
Low temperature torque (-40°C), N.m Starting torque Running torque	0.35 0.05
Corrosion (T2 copper, 100°C, 24hrs)	Qualified
Noise level (6201 bearing) Number of abnormal sound for starting, N Number of abnormal sound for running, N	2 2