



# LUBE BASE OIL

---

## 润滑油基础油

---

江苏利宏科技发展有限公司  
JIANGSU LIHONG TECHNOLOGY DEVELOPMENT CO.,LTD

Create **green** material with wisdom ,  
Serve human **health** !

智造绿色材料，服务人类健康！



## PREFACE 前言

江苏利宏科技发展有限公司自成立以来，一直专注于合成润滑基础油、合成酯等产品的研发、生产，为客户提供高安全性、多功能性、性能卓越的高端新型材料。

公司醚类、酯类合成润滑基础油产品的产业化技术及装备在行业内领先，是我国航空、航天、航海等特种机械及装备，汽车、民用空调压缩机等行业用润滑油厂家的主力供应商。

Since its establishment, Jiangsu Lihong Technology Development Co., Ltd. has been focusing on the research and development, production of synthetic lubricating base oils, synthetic esters, and other products, providing customers with high-end new materials with high safety, multifunctional, and excellent performance.

The industrialization technology and equipment of the company's ether and ester synthetic lubricating base oil products are leading in the industry. It is the main supplier of lubricating oil manufacturers for industries such as aviation, aerospace, and navigation in China, as well as automotive and civil air conditioning compressors.



**Become A First-Class Lubricant Base Oil Supplier !**

成为一流的润滑基础油供应商！

## CONTENTS 目 录

1. 压缩机油基础油   Compressor Oil Base Oil	8.	液压油与液压液基础油   Hydraulic Oil And Hydraulic Fluid Base Oil
水溶性基础油产品   Water-Soluble Base Oil Products .....	17	全合成液压油   Fully Synthetic Hydraulic Oil .....
水不溶基础油产品   Water-Insoluble Base Oil Products .....	18	水乙二醇抗燃液压液增稠剂   Water Ethylene Glycol Flame Retardant Hydraulic Fluid Thickener.....
2. 合成酯类产品   Synthetic Ester Products .....	19	7. 合成酯   Etic Ester .....
3. 齿轮油基础油   Gear Oil Base Oil.....	20	9. 发动机油基础油   Engine Oil Base Oil .....
4. 饱和多元醇酯   Saturated Polyol Ester.....	21	10. PAG淬火介质   PAG Quenching Medium .....
5. 链条油基础油   Chain Oil Base Oil.....	22	11. 金属加工液   Metalworking Fluid
6. 酯类链条油   Ester Chain Oil .....	25	1) RPE系列   Rpe Series .....
	26	2) 酚醚磷酸酯系列   Phenol Ether Phosphate Series.....
	27	TXP-4.....
		TXP-10.....
		3) 脂肪醇醚磷酸酯系列   Fatty Alcohol Ether Phosphate Series.....

# COMPRESSOR OIL BASE OIL

## WATER-SOLUBLE BASE OIL PRODUCTS

### 压缩机油基础油 · 水溶性基础油产品

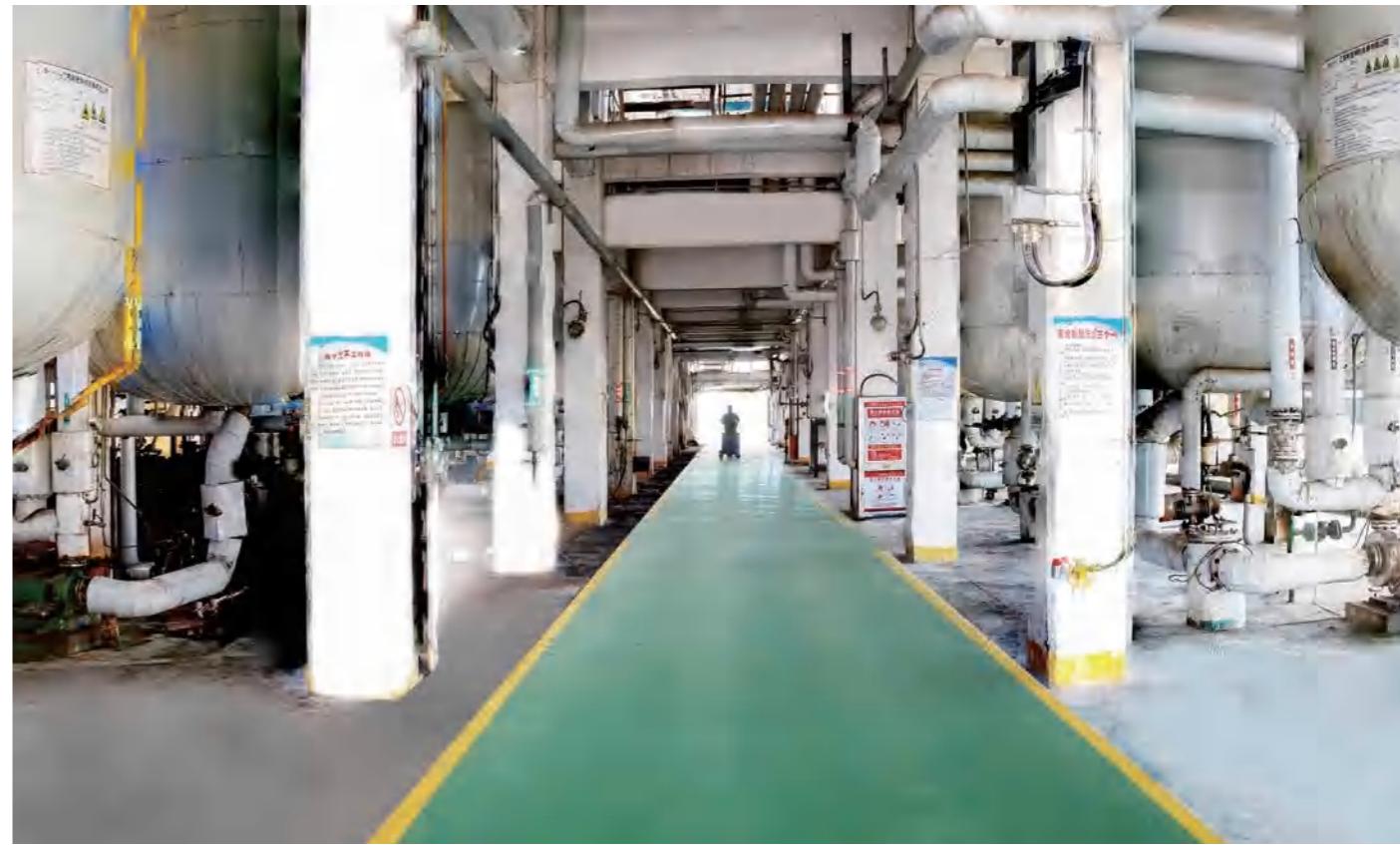
#### 产品优势

1. 是高极性产品，针对与碳氢液体或气体接触几乎没有溶解度或稀释很少的要求设计制造。
2. 明显减低甲烷、乙烷、丙烷、乙烯和丙烯的溶解倾向。该产品具有抗磨损保护性和可靠的润滑性，满足长使用寿命要求。
3. 降低了烃类气体溶解度，从而减少粘度损失，改善了活塞环与填料的润滑，延长工作周期减少停机。
4. 可以控制聚合度以及在分子设计中引入不同的功能性元素，官能团实现特定的功能，为客户量身定做产品。
5. 也可以通过分子结构设计，为客户量身定做产品以达到更低的倾点，更高的粘度指数，更好的相容性及极压性等。



#### Product advantage

1. It is a high polarity product, designed and manufactured for the requirement of almost no solubility or little dilution in contact with hydrocarbon liquid or gas.
2. Significantly reduce the dissolution tendency of methane, ethane, propane, ethane and propylene. The product has anti-wear protection and reliable lubrication, meeting the requirements of long service life.
3. It reduces the solubility of hydrocarbon gas, thus reducing the viscosity loss, improving the lubrication of piston ring and packing, extending the working cycle and reducing the shutdown.
4. It can control the degree of polymerization and introduce different functional elements into the molecular design. Functional groups can achieve specific functions and customize products for customers.
5. Through molecular structure design, products can be customized for customers to achieve lower pour point, higher viscosity index, better compatibility and extreme pressure.



#### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
WPS-20	20	5	192	0.05	200	-45	30	0.05
WPS-46	46	9	180	0.05	200	-45	30	0.05
WPS-68	68	13	200	0.05	220	-40	30	0.05
WPS-100	100	18	200	0.05	220	-40	30	0.05
WPS-150	150	29	210	0.05	220	-40	30	0.05
WPS-220	220	43.5	235	0.05	230	-38	30	0.05
WPD-320	320	58	240	0.05	240	-36	30	0.05
WPD-460	460	80	250	0.05	240	-35	30	0.05
WPD-1000	1000	180	280	0.05	240	-30	30	0.05

# COMPRESSOR OIL BASE OIL

## WATER-INSOLUBLE BASE OIL PRODUCTS

### 压缩机油基础油 · 水不溶基础油产品



#### 产品优势

几乎无色的纯净均聚物产品，提供较低的摩擦系数和中等的极压性能，与合成橡胶有良好的兼容性，适合于冷冻压缩机油，醚酯型空气压缩机油和气体压缩机油。

1. 出众的低温流动性，最低可达 - 50°C；
2. 高粘度指数，在热压缩机中保持粘度，操作温度范围为 90 ~ 120°C；
3. 更快的散热速度，可降低操作温度；
4. 溶解能力，清洁阀门，清洁孔；
5. 具有更清洁无油泥生成的油路系统，保证压缩机运行更安全、更加环保；
6. 超长的使用寿命，可以延长润滑油的换油周期，8000小时以上；
7. 与二氧化碳，氮气，天然气等的溶解度非常低；
8. 用于冷冻压缩油与 R134A 有很好的相容性，用于开放压缩机。

#### Product Advantage

Almost colorless pure homopolymer product, which provides low friction coefficient and medium extreme pressure performance, has good compatibility with synthetic rubber, and is suitable for refrigeration compressor oil, ether ester type air compressor oil and gas compressor oil.

1. Excellent low-temperature fluidity, with a minimum of - 50 °C ;
2. High viscosity index, maintain viscosity in the hot compressor, and the operating temperature range is 90 ~ 20 °C ;
3. Faster heat dissipation speed can reduce the operating temperature;
4. Solubility, cleaning valve, cleaning hole;
5. It has a cleaner oil-way system without sludge generation to ensure safer and more environmentally friendly compressor operation;
6. Super long service life can extend the oil change period of lubricating oil, more than 8000 hours;
7. Very low solubility with carbon dioxide, nitrogen and natural gas;
8. The refrigerant compressor oil has good compatibility with R134A and is used for opening the compressor.



#### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
PAG-15	15	3	160	0.05	200	-46	30	0.05
PAG-32	32	6	160	0.05	200	-46	30	0.05
PAG-46	46	9	180	0.05	200	-40	30	0.05
PAG-56	56	12	180	0.05	200	-40	30	0.05
PAG-68	68	13	180	0.05	215	-45	30	0.05
PAG-100	100	17.5	190	0.05	220	-45	30	0.05
PAG-150	150	26	210	0.05	220	-40	30	0.05
PAG-220	220	38	225	0.05	220	-30	30	0.05
PAG-320	320	55	239	0.05	235	-30	30	0.05
PAG-460	460	70	231	0.05	230	-30	30	0.05
PAG-680	680	105	252	0.05	245	-30	30	0.05
PAG-1000	1000	150	265	0.05	245	-30	30	0.05

## SYNTHETIC ESTER PRODUCTS

### 合成酯类产品

#### 产品优势

新戊基饱和多元醇酯作为基础油，它能与制冷剂 HCFC 和 HFC 相溶，适用在 R-134A、R-407C 和 R-410A 的往复式、回旋式和滚动制冷压缩机中使用。具有极佳的热稳定性、水解稳定性、低蒸发率和极低的结焦倾向等特点，也是醚酯型空压机油和半合成空压机油的常用酯类基础油。

#### Product Advantage

As the base oil, neopentyl saturated polyol ester can be miscible with refrigerant HCFC and HFC, and is suitable for reciprocating, rotary and rolling refrigeration of R-134A, R-407C and R-410A. Used in the compressor. It has excellent thermal stability, hydrolysis stability, low evaporation rate and extremely low coking tendency. It is also the common choice of ether ester type air compressor oil and semi-synthetic air compressor oil. Use ester base oil.

#### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
POE-22	22	4.3	100	0.05	200	-57	20	0.05
POE-32-A	32	5.2	88	0.05	215	-48	20	0.05
POE-46-A	46	6.6	93	0.05	235	-45	20	0.05
POE-68-A	68	8.2	86	0.05	255	-41	20	0.05
POE-100	100	11	94	0.05	260	-38	40	0.05
POE-170-A	170	15.5	92	0.05	270	-28	50	0.05
POE-220-A	220	18.5	93	0.05	300	-26	50	0.05
POE-320	320	35	155	0.05	295	-32	100	0.05



GEAR OIL BASE OIL

齿轮油基础油品

#### 产品优势



#### Product Advantage

1. 特制结构的水溶性基础油，具有卓越的负荷承载能力，即使在没有极压抗磨剂下，仍有很高的极压减磨性能。减少或超免由于表面疲劳而在齿面上形成微点蚀。
2. 较宽的温度范围内都显示出很好的导热性能，利于更快散热，有效延长油品和齿轮箱的使用寿命。
3. 优秀的热氧化安定性，能大幅延长润滑油试用寿命，延长维护周期。
4. 相比其他合成碳氢化合物，能提高 10% 的能效和有效降低工作温度。
5. 低摩擦系数产热少，高导热系数传热快，推荐用于涡轮蜗杆油。

## GEAR OIL BASE OIL

### 齿轮油基础油品

#### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
WPS-100	100	18	200	0.05	220	-40	30	0.05
WPS-150	150	29	210	0.05	220	-40	30	0.05
WPS-220	220	43.5	235	0.05	230	-38	30	0.05
WPD-320	320	58	240	0.05	240	-36	30	0.05
WPD-460	460	80	250	0.05	240	-35	30	0.05
WPD-1000	1000	180	280	0.05	240	-30	30	0.05
PAG-150	150	26	210	0.05	220	-40	30	0.05
PAG-220	220	38	225	0.05	220	-30	30	0.05
PAG-320	320	55	239	0.05	235	-30	30	0.05
PAG-460	460	70	231	0.05	230	-30	30	0.05
PAG-680	680	105	252	0.05	245	-30	30	0.05
PAG-1000	1000	150	265	0.05	245	-30	30	0.05



SATURATED POLYOL ESTER  
饱和多元醇酯

**产品优势:** 饱和多元醇酯提供优良的极压抗磨性及添加剂相溶性。

**Product Advantage:** Saturated polyol ester provides excellent extreme pressure and wear resistance and additive solubility.

#### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
POE-100	100	11	94	0.05	260	-38	40	0.05
POE-170-A	170	15.5	92	0.05	270	-28	50	0.05



## CHAIN OIL BASE OIL

### 链条油基础油

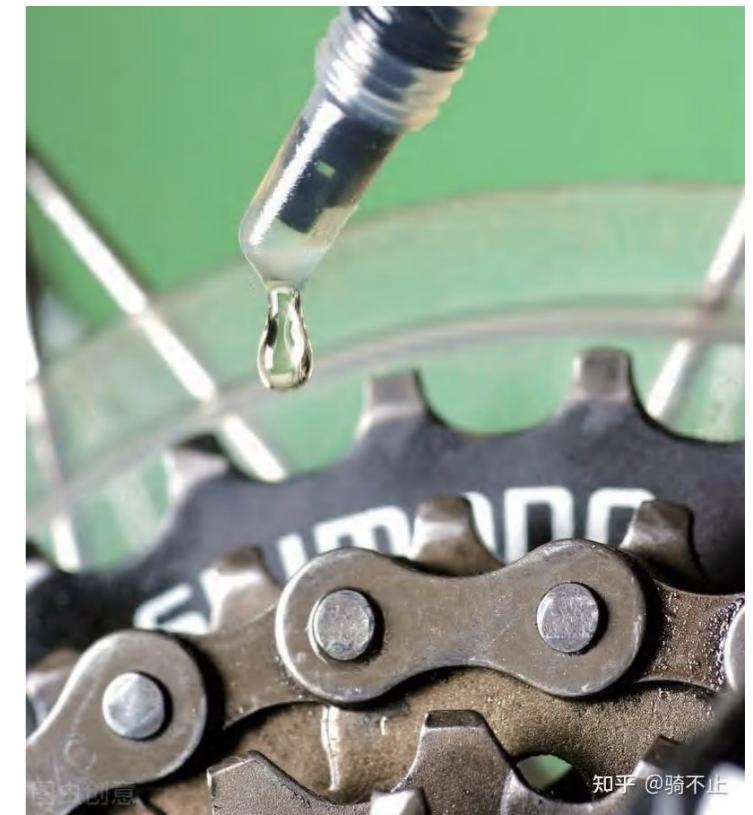
#### 产品优势

- 该基础油产品具有独特的清洁性，分解产物可溶于剩余的润滑油中不产生油泥，积碳和漆膜，烟炱。
- 高沸点和闪点，可以在高温下安全使用，具有良好的润滑性，与抗氧剂和防锈剂复配，推荐200°C以下温度的长期使用，常应用于纺织印染行业。
- 特有的结构设计避免漆膜表面缩孔，红眼等缺陷，适用温度可达240°C，广泛应用于汽车行业。
- 该基础油产品的低毒性，可用于食品级链条传动，低粘度PAG可以生物降解。



#### Product Advantage

- The base oil product has unique cleanliness, decomposition products soluble in the remaining lubricating oil, do not produce sludge, carbon and paint film, Soot.
- High boiling point and flash point, can be used safely at high temperature, with good lubricity, with antioxidant, agent and antirust agent, recommended for long-term use below 200 °C, often used in textile printing, dyeing industry.
- The special structure design avoids the defects such as shrinkage and red-eye on the surface of the paint film, and the suitable temperature can reach 240 °C, which is widely used in the automobile manufacturing industry.
- The base oil product is low toxicity, can be used for food-grade chain transmission, low viscosity PAG can be biodegraded.



#### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
PAG-150	150	26	210	0.05	220	-40	30	0.05
PAG-220	220	38	225	0.05	220	-30	30	0.05
PAG-320	320	55	239	0.05	235	-30	30	0.05
PAG-460	460	70	231	0.05	230	-30	30	0.05
WPS-150	150	29	210	0.05	220	-40	30	0.05
WPD-320	320	58	240	0.05	240	-36	30	0.05
WPD-460	460	80	250	0.05	240	-35	30	0.05
WPD-1000	1000	180	280	0.05	240	-30	30	0.05



## ESTER CHAIN OIL 酯类链条油

### 产品优势

酯类链条油，以双季戊醇酯和多元酸酯为基础油，可以应用在 250-300 度高温，具有很好的高温性能，高温结焦量及蒸发损失小，结焦板面也很清洁。

### Product Advantage

Ester chain oil, based on dipentaeryl alcohol ester and polybasic acid ester, can be used in 250-300 °C high temperature, with much better high temperature performance, low coking amount and evaporation loss at high temperature, and very clean coking surface.

### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
POE-100	100	11	94	0.05	260	-38	40	0.05
POE-170-A	170	15.5	92	0.05	270	-28	50	0.05
POE-380	380	25.88	91	0.05	310	-18	30	0.05
SDPZ-2	50	8	130	0.05	270	-40	30	0.05
SDPZ-3	320	26.8	111	0.05	275	-30	30	0.05

## HYDRAULIC OIL AND HYDRAULIC FLUID BASE OIL

## FULLY SYNTHETIC HYDRAULIC OIL

## 液压油与液压液基础油 · 全合成液压油



### 产品优势

全合成液压油适合高压，高温的严苛工况。终产品的防火登记可达 FM Grade II。基础油低毒，可生物降解。

### Product Advantage

Fully synthetic hydraulic oil is suitable for severe working conditions of high pressure and high temperature. The fire protection registration of final products can reach fm grade ii. Base oil is low toxic and biodegradable.

### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
PAG-32	32	6	160	0.05	200	-46	30	0.05
PAG-46	46	9	180	0.05	200	-40	30	0.05
PAG-56	56	12	180	0.05	200	-40	30	0.05
PAG-68	68	13	180	0.05	215	-45	30	0.05

## HYDRAULIC OIL AND HYDRAULIC FLUID BASE OIL

### WATER ETHYLENE GLYCOL FLAME RETARDANT

### HYDRAULIC FLUID THICKENER

### 液压油与液压液基础油 · 水乙二醇抗燃液压液增稠剂

#### 产品优势

1. 抗剪切性
2. 极佳的润滑性提供良好油膜强度，耐剪切性优异高粘度指数
3. 提供良好的粘温性能高澄清液体
4. 提供优良透明度的配制品保证系统效力高润滑性
5. 满足中低压系统的普遍需要稳定的粘度和油点
6. 提高生产配制的便捷，控制泡沫性水剂稀释液
7. TANK 运输，方便配制



#### Product Advantage

- |  |  |
|--|--|
| 1. Shear resistance  | system effectiveness and high lubricity  |
| 2. Excellent lubricity provides good oil film strength, excellent shear resistance, and high viscosity index | 5. Stable viscosity and oil point to meet the general needs of medium and low pressure systems |
| 3. Provide good viscosity temperature performance and high clarity liquid                                    | 6. Improve the efficiency of production preparation and control foam aqueous diluent           |
| 4. Provide excellent transparency in the formulation to ensure   | 7. TANK transportation for easy preparation  |

#### 产品参数 | Product Parameters

产品	外观	运动粘度 40°C	运动粘度 100°C	粘度指数	倾点	闪点开口	浊点 1%aq
Product	Appearance	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Pour Point	Flashpoint	Cloud Point 1%aq
W-18000	无色至淡黄色透明液体 Colorless to light yellow transparent liquid	18000	2540	430	6	245	75



ETIC ESTER 合成酯

#### 产品优势

脂肪酸酯，应用于油基产品中有助于降低油和金属间的表面张力，提供工件与工具间的渗透力。应用于水基产品中 - 用于溶解油和带入极压防腐添加剂。



#### Product Advantage

Fatty acid ester, applied in oil-based products, can help reduce the surface tension between oil and metal, and provide the penetration force between workpiece and tool. Used in water-based products - used to dissolve oil and bring in EP anti-corrosion additives.

#### 产品参数 | Product Parameters

规格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	皂化值 Mg
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Saponification value
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	KOH/g
SDYZ-1	46	9.5	197	1	310	-40	190
SDYZ-2	68	13	200	11	310	-38	200

## 产品优势

作为全合成发动机油，其具有出色的分散性和清洁性，优良的高温稳定性并且低摩擦系数，可以提高燃油经济性。

## ENGINE OIL BASE OIL 发动机油基础油



### Product Advantage

As a fully synthetic engine oil, it has excellent dispersion and cleanliness, excellent high-temperature stability and low friction coefficient, which can improve fuel economy.

### 产品参数 | Product Parameters

规 格	运动粘度 40°C	运动粘度 100°C	粘度指数	酸值 Mg	闪点开口	倾点	色度	水份
Specifications	Kinematic Viscosity 40°C	Kinematic Viscosity 100°C	Viscosity Index	Acid Value Mg	Flashpoint	Pour Point	Chroma	Moisture
	mm <sup>2</sup> /s	mm <sup>2</sup> /s		KOH/g	°C	°C	APHA	%
PAG-32	32	6	160	0.05	200	-46	30	0.05
PAG-46	46	9	180	0.05	200	-40	30	0.05
PAG-56	56	12	180	0.05	200	-40	30	0.05
PAG-68	68	13	180	0.05	215	-45	30	0.05

## PAG QUENCHING MEDIUM

## PAG淬火介质

### 产品优势

- 应用于锻钢、铸铁、铸钢、铜浸镀及铝合金铸件等的热处理；
- 高粘度淬火介质，通过调节 PAG 淬火浓度，获得油和水之间不同的冷却能力，减少工件变形量和开裂；
- 极佳的清净性和良好的稳定性，适应不同工况要求。

### Product Advantage

- It is applied to heat treatment of forged steel, cast iron, cast steel, copper immersion plating and aluminum alloy castings;
- High-viscosity quenching medium can obtain different cooling capacity between oil and water by adjusting the pag quenching concentration to reduce the deformation and cracking of the workpiece;
- Excellent detergency and stability to meet the requirements of different working conditions.



### 产品参数 | Product Parameters

产 品	Product	W-18000	W-50000	W-70000
外 观	Appearance	无色至淡黄色透明液体 / Colorless to light yellow transparent liquid		
运动粘度 40°C	Kinematic Viscosity 40°C	18000	55000	75000
运动粘度 100°C	Kinematic Viscosity 100°C	2540	7800	9500
粘度指数	Viscosity Index	430	430	500
倾点	Pour Point	6		
闪点开口	Flashpoint	245	240	235
浊点 1%aq	Cloud Point 1%aq	75		



## METALWORKING FLUID RPE SERIES

### 金属加工液 · RPE 系列

#### 产品优势

1. RPE 系列中 1740、2035 溶于水，1720、2520、2525、3110 不溶于水，它们均不溶于稀 (5 %) 碱溶液。
2. RPE1720、1740、2035 溶于稀 (5 %) 酸溶液；而 2520、2525、3110 则不溶。
3. RPE 系列易溶于乙醇、异丙醇、甲苯、矿物油等有机溶剂；作为非离子表面活性剂，它们与其它的非离子、阴离子及阳离子表面活性剂相容，它们对水中的钙、镁离子机器它的硬水离子不敏感；
4. RPE 系列能耐酸并且在某种程度上也耐碱。

#### Product Advantage

1. 1740 and 2035 in the polyether RPE series are soluble in water, while 1720, 2520, 2525, and 3110 are insoluble in water. They are all insoluble in dilute (5%) alkaline solutions.
2. RPE1720, 1740, 2035 dissolved in dilute (5%) acid solution; However, 2520, 2525, and 3110 are insoluble.
3. The RPE series is easily soluble in organic solvents such as ethanol, isopropanol, toluene, mineral oil, etc; As non ionic surfactants, they are compatible with other non ionic, anionic, and cationic surfactants, and are not sensitive to calcium and magnesium ions in water or their hard water ions;
4. The RPE series is acid resistant and to some extent alkali resistant.

#### 产品应用

1. RPE 系列可用在乳业、酿酒业和软饮料行业的清洗剂，从机器的金属部分清除铁屑和薄片的清洗剂及其他工业清洗剂中；也可在碟机清洗剂和漂清助剂中用作低泡表面活性剂和消泡剂，RPE 系列与来自我们的 LF 系列的低泡型表面活性剂并用通常会得到协同作用。
2. RPE 系列可在合成的金属加工液、脱模剂和合成的纺丝涂层中用作润滑剂。特别是在稍高温度时它们是有效的润滑剂而且它们易于洗去，而且 RPE 系列在高温时不会产生焦油状残渣。
3. 在电子工业中，有在印刷电路板中的应用适合于 RPE 系列；
4. 它们也可用作传热流体和液压流体；在制糖工业中，RPE 2520 在约 100 °C 时表现出好好的消泡性能，因而可用于糖的精制。

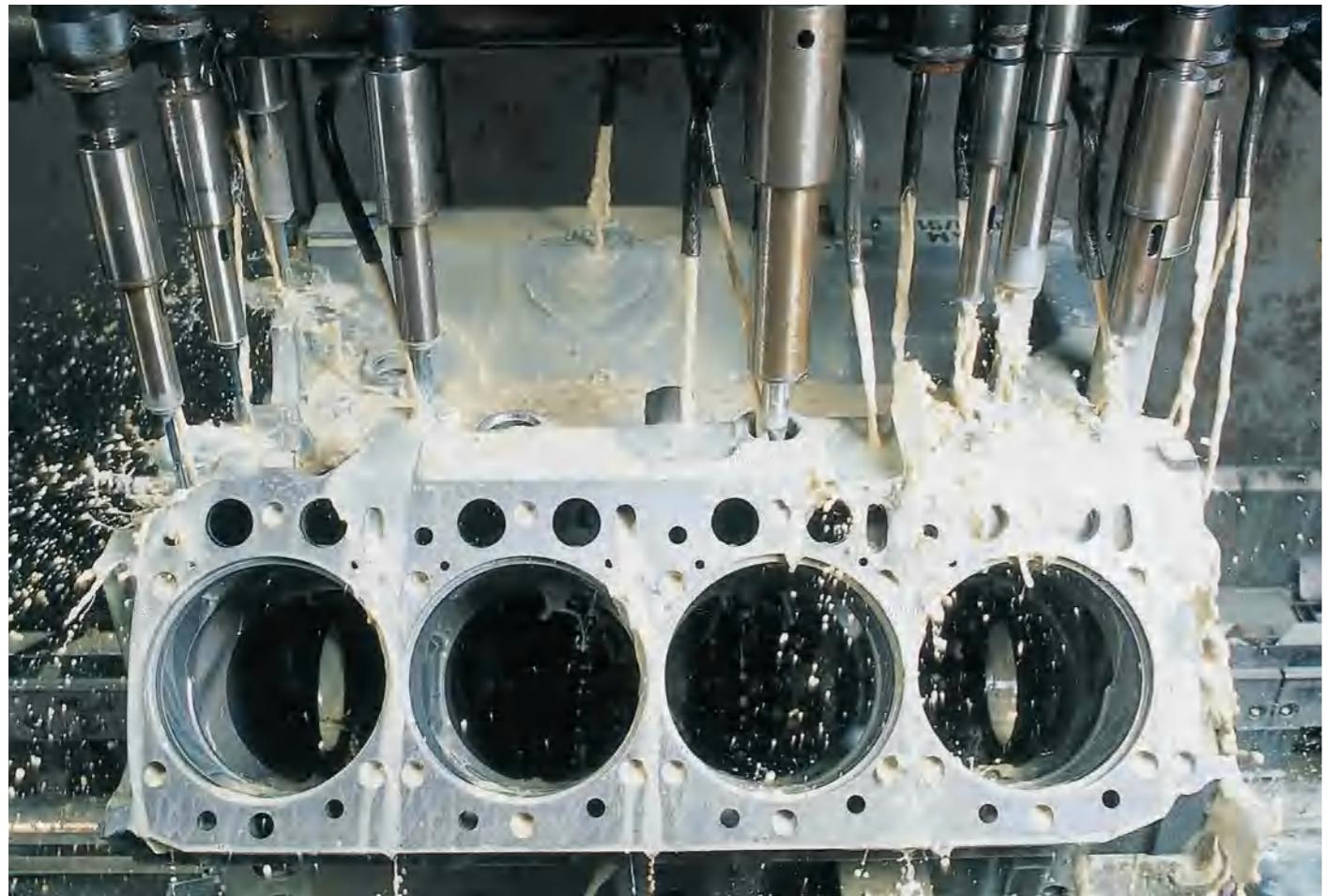


#### Product Application

1. The RPE series can be used as cleaning agents in the dairy, brewing, and soft beverage industries, as well as cleaning agents for removing iron filings and thin sheets from the metal parts of machines and other industrial cleaning agents; It can also be used as a low-foaming surfactant and defoamer in disc cleaning agents and rinsing aids. The combination of RPE series and low-foaming surfactants from our LF series usually yields synergistic effects.
2. The RPE series can be used as a lubricant in synthetic metal working fluids, release agents, and synthetic spinning coatings. Especially at slightly higher temperatures, they are effective lubricants and are easy to wash off, and the RPE series does not produce tar like residues at high temperatures.



3. In the electronics industry, there are applications suitable for the RPE series in printed circuit boards;
4. They can also be used as heat transfer fluids and hydraulic fluids; In the sugar industry, RPE 2520 exhibits good defoaming performance at approximately 100 °C , making it suitable for sugar refining.



### 产品参数 | Product Parameters

产品	外观	分子量	密度	PH 值	浊点 1%aq
Product	Appearance	g/mol	g/cm³	PH Value	Cloud Point 1%aq
RPE 1720	无色清亮液体 / Colorless clear liquid	2150	1.02	7	37
RPE 1740	无色清亮液体 / Colorless clear liquid	2650	1.03	7	50
RPE 2035	液体 / liquid	4100	1.03	7	41
RPE 2520	无色清亮液体 / Colorless clear liquid	3100	1.02	7	28
RPE 2525	液体 / liquid	2000	1.03	7	32
RPE 3110	液体 / liquid	3110	1.02	7	21



### Phenol ether phosphate TXP-4

1. 呈阴离子型，常与阴离子、非离子和两性离子复配使用，耐寒性良好，易溶于有机溶剂，耐酸、耐碱、耐高温，稳定性好；具有良好的去污、乳化、润湿、分散、抗静电等性能，脱脂力强。用于家庭、工业洗涤剂，如配制干洗剂、瓷面、玻璃清洗剂、金属清洗剂；
2. 纺织工业用助剂：如配制纺丝油剂、渗透剂、煮练剂、丝光剂；
3. 造纸工业用助剂：如配制脱墨剂；
4. 皮革工业用助剂：如配制脱脂剂、匀染剂；
5. 其他工业用助剂：如有机磷农药乳化剂，金属切削润滑剂，电镀液添加剂等。





## METALWORKING FLUID

### PHENOL ETHER PHOSPHATE SERIES · TXP-10

### 金属加工液 · 酚醚磷酸酯系列 · TXP-10

#### 酚醚磷酸酯 TXP-10

- 能耐强碱，在浓碱中具有良好的净洗能力，易溶于有机溶剂，易溶于水；
- 具有较强的抗静电、乳化、平滑、柔软性能；用作洗涤增强剂；用于配制干洗剂；用作金属清洗剂中添加的乳化剂；乳液聚合用乳化剂；农药和化妆品生产中添加的乳化剂，以及防腐蚀剂和抗静电剂。

#### Phenol ether phosphate TXP-10

- It is resistant to strong alkalis and has good cleaning ability in concentrated alkalis. It is easily soluble in organic solvents and water;
- It has strong anti-static, emulsifying, smooth, and soft properties; Used as a washing enhancer; Used for preparing dry cleaning agents; Used as an emulsifier added to metal cleaning agents; Emulsifier for lotion polymerization; Emulsifiers, anti-corrosion agents and antistatic agent added in the production of pesticides and cosmetics.



#### 产品参数 | Product Parameters

产品		外观 (25°C)	固含量	PH 值 (2% 水溶液)
Product		Appearance	solids	PH Value (2% aqueous solution)
酚醚磷酸酯 Phenol ether phosphate	TXP-4	无色或微黄色透明液体 Clear near water-white liquid	≥ 95%	≤3.0*
	TXP-10		≥ 95%	≤3.0*

#### 产品优势

- 具有良好的水溶性、去污、乳化、润滑、净洗、分散、抗静电和防锈性能，良好的电解质相溶性，对热和碱有稳定性。耐酸、耐碱，耐硬水、耐无机盐、耐高温，同时生物降解性好，刺激性低等优点。同时脱脂力强；
- 具有抗静电性、平滑性、润湿性，缓蚀性，用作合成纤维加工中改善可纺性能的原料。有吸湿性，在低温时仍具有良好抗静电性，广泛用于化纤油剂中作抗静电剂。用作工业碱性清洗剂及干洗剂，金属加工工作液，有机磷农药乳化剂，纺织油剂的主要成份；
- 是良好的助溶剂，乳液聚合乳化剂，颜料分散剂，化妆品乳化剂，油井钻井泥浆润滑分散剂、造纸工业用脱墨剂；皮革工业用脱脂剂、匀染剂等；
- 具有良好的去污性，用于配制洗净剂。广泛用于日用化学工业，是洗发香波和多种化妆品中主要组分之一；
- 在 pH 值 6~7 左右可获得较高的活性和稳定性。推荐用量 3~12%。

#### Product Advantage

- It has good water solubility, decontamination, emulsification, lubrication, cleaning, dispersion, anti-static and rust resistance, good electrolyte solubility, and stability to heat and

## METALWORKING FLUID

### FATTY ALCOHOL ETHER PHOSPHATE SERIES

### 金属加工液 · 脂肪醇醚磷酸酯系列

alkali. It has the advantages of acid and alkali resistance, hard water resistance, inorganic salt resistance, high temperature resistance, good biodegradability, and low irritation. At the same time, it has strong degreasing power;

- It has anti-static properties, smoothness, wettability, and corrosion inhibition, and is used as a raw material for improving spinnability in synthetic fiber processing. It has hygroscopicity and good antistatic property at low temperature. It is widely used as antistatic agent in chemical fiber finishes. Used as an industrial alkaline cleaning agent and dry cleaning agent, metal processing working fluid, organic phosphorus pesticide emulsifier, and the main component of textile oil agent;
- It is a good cosolvent, lotion polymerization emulsifier, pigment dispersant, cosmetic emulsifier, oil well drilling mud lubricating dispersant, and deinking agent for paper industry; Degreasing agents, leveling agents, etc. used in the leather industry;
- It has good detergency and is used for preparing detergents. Widely used in the daily chemical industry, it is one of the main components in shampoo and various cosmetics;
- High activity and stability can be achieved at pH values around 6-7. Recommended dosage is 3-12%.

#### 产品参数 | Product Parameters

产品	外观 (25°C)	固含量	PH 值 (2% 水溶液)
Product	Appearance	solids	PH Value (2% aqueous solution)
脂肪醇醚磷酸酯 Fatty alcohol ether phosphate	MOA-3P	无色或微黄色透明液体 Clear near water-white liquid	≥95%
	MOA-9P		≥95%



## 江苏利宏科技发展有限公司

总部：江苏省南京市江宁区南京南站徽商大厦

厂址：江苏省淮安市盐化新材料产业园区张朱路 6 号

电话：0517-83571686 手机：13913013808 传真：0517-87618866

邮箱：Dai@sjlhpu.com 网址：[www.jslhpu.com](http://www.jslhpu.com)



Official Website  
公司官网

## JIANGSU LIHONG TECHNOLOGY DEVELOPMENT CO.,LTD

Headquarters: Huishang Building, Nanjing South Railway Station, Jiangning District, Nanjing, Jiangsu Province

Address: No. 6, Zhangzhu Road, Huai'an Industrial Park, Huai'an City, Jiangsu Province

Tel: +86 0517-83571686, +86 13913013808 Fax: 0517-87618866

Email: [Dai@sjlhpu.com](mailto:Dai@sjlhpu.com) <http://www.jslhpu.com>