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Company **PROFILE**

Yamabala Industry Corp.

www.yamabala.com

Welcome To Yamabala Industry Corp.,

Our Marketing Goal is to
convert, Retain users & Drive Sales

- **Creative**
- **Enthusiasm**
- **Environment Protection**
- **Trust**



Solve customers' problems while taking
into account the needs of environmental
protection, and do our best for the earth

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About Company

Yamabala Industrial, founded in 1996, is a company specializing in lubricants and technical cooperation with Japan to develop customized lubricants. It provides a series of products of lubrication for industrial equipment maintenance. It develops and designs customized lubricants for our clients.

Yamabala agents Italy Fomblin, Klüber Lubricant, USA Super Lube food grade oil, and others, can provide the most suitable clean room grease for different clean room environments, and fits our customer's environment and needs with the most cost-effective and safe oil.

Yamabala Fluorine oil (PFPE oil) is highly praised by the China high-speed rail system. It also is the designated vacuum machine oil of USA AKT company. In addition to more than the average oil it has better corrosion resistance, oxidation resistance, excellent temperature dependencies, extremely low oil separation rate and surface tension and is long lasting. Also it applies to 20°C 10⁻¹⁶ torr high vacuum environment.

Yamabala Industrial established Suzhou Yamabala Trading Co., Ltd. in 2011. It provides professional services of lubrication knowledge, with reliable products in Shanghai, Guangzhou, Shenzhen, Dongguan and other areas in China which meet customer lubrication needs.

Yamabala service areas includes Taiwan, mainland China, Vietnam, Thailand more than 700 technology companies. It provides enterprises free lubrication education and training, production line lubricating problems diagnosis and integration, and oil/grease analysis (FTIR analysis / ICP element analysis).

We also provide OEM/ODM (Original Equipment/ Design Manufacturer) to develop special oil and grease for various industry needs. With professional, experienced and high quality products in lubrication, we can customize product design for you.

We not only provide you excellent products to solve your lubrication problems, but also to with a satisfactory price.

Yamabala is your trusted partner.

Message From The CEO



Alex Liu
CEO

With limited resources on earth, we are facing environmental and shared value challenges.

We do more than come up with new products and services. We must reshape technology to solve key industrial and environmental challenges. Together towards new standards of quality and sustainability.

The idea of progress has always been at the heart of our company and has driven us to many decisive achievements. These basic concepts have always guided the humanistic and scientific spirit of YAMABALA.

Solve customer problems while taking into account environmental protection needs. In chemistry, bonding is the ongoing process of linking elements together into molecules, Achieve our superior products and competitiveness.

This is the value we create YAMABALA products.

In the field of high-end lubrication, become the industry leader.

Our Services



Education & Training

Oil lubrication education and training



Diagnosis and Integration

Diagnosis and integration of lubricating oil problems on the production line



Oil Inspection & Analysis

Assist in oil inspection and analysis (FTIR spectral analysis, ICP elemental analysis)

Additional Services



Equipment Maintenance & Tracking Records



Faulty Equipment & Site Survey



Lubrication Education & Problem Improvement



Maintenance & benefit analysis



Transmission equipment & inspect and analysis



PFPE grease features and applications

01

Excellent performance in extreme conditions

A unique combination of characteristics more than any kind of lubricant

- Excellent high temperature stability
- Non-carbonising
- Chemical inert and resistance
- Low evaporation rate
- Low friction coefficient
- Non-conversion
- No ignition point
- Microbial inert
- High viscosity index
- Wide temperature range
- Maintain flexible when below pour point
- Low surface energy
- Outstanding electrical characteristics

03

Chemical inert

An unique combination of characteristics
Far more than any kind of lubricant

- Super excellent compatibility with plastic and rubber components.
- Approved to use in oxygen environment
- Resistant to aggressive chemicals

04

YAMABALA* 0% important loss

YAMABALA complete not affected by the heat at the same time still smooth and soft

Low evaporation rate benefits

- Continuous and effective use of high temperature and vacuum environment
- Super excellent durability, even coated into a thin film
- Specifically for electronics and clean room environment can not stand the gasification change of lubricant

05

Not dissolution in common solvents and fuels

YAMABALA will not dissolve in

- Water and Steam
- Hydrocarbon
- Alcohol
- Acid and Hydrochloric acid

06

Chemical resistance

YAMABALA will not be the corrosion of the following chemicals

- Sulfuric acid
- Nitric acid
- Hydrofluoric acid
- Strong oxidizing agent
- Solubility / Water-based etchant

02

High temperature durability

Hydrocarbon * > 60% Weight loss

Grease completely degraded, carbonization occurs at the same time remnant hard residue

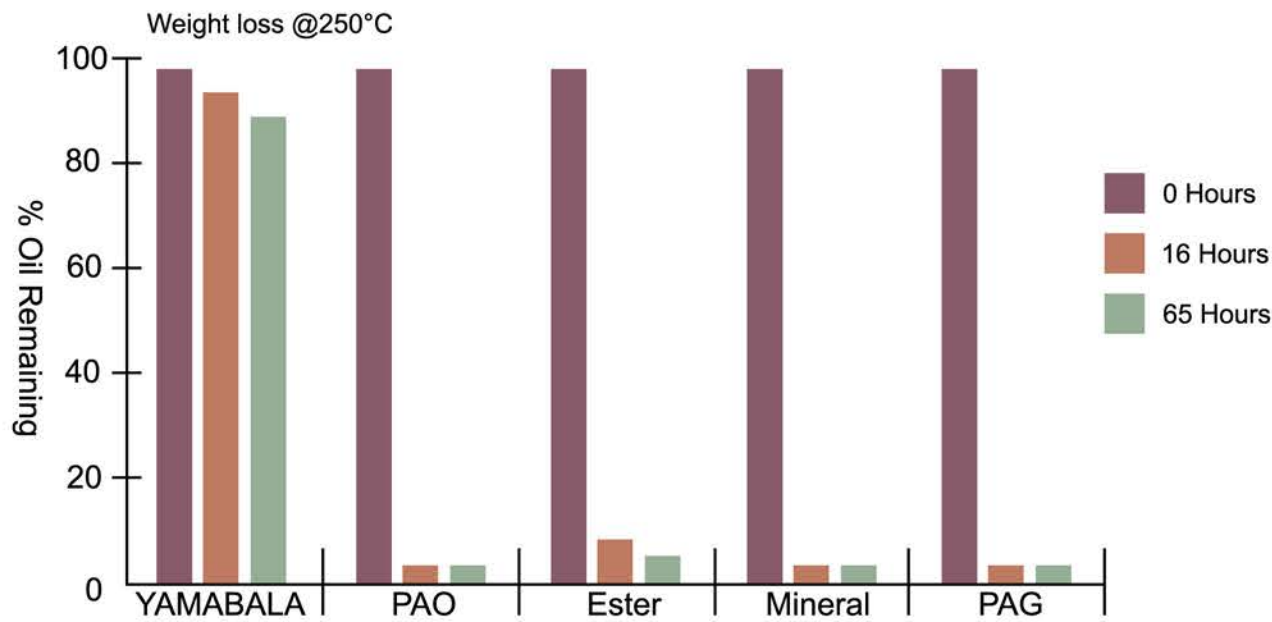


sample were placed in an oven at 232°C for 40 hours



Why Choose us?

Evaporation rate at different times



Non-conversion:

- The characteristic of non-conversion means YAMABALA lubricant is very suitable for Painting Spray Booth and Automotive production. When using lubricant like silicone which will convert and cause risks of pollution.



Non-flammable:

- YAMABALA Lubricate liquids and grease are non-flammable products, it does not promote or support combustion.
- The picture shows hydrocarbon lubricant will burn at high temperatures.



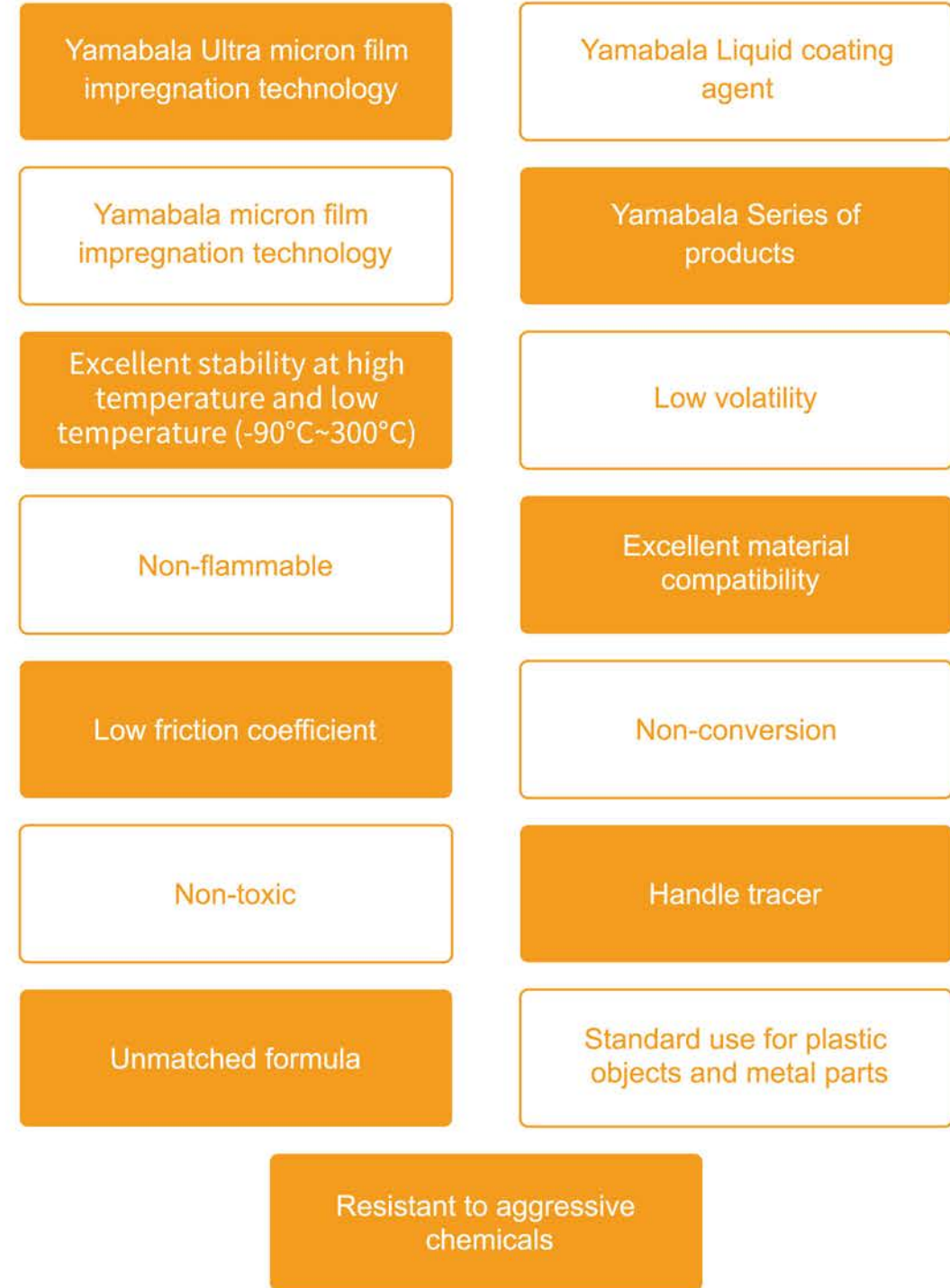
Microbial inert:

Safety and environmental protection are top priorities

- Non-toxic - Will not promote the breeding of microorganisms
- There are some ingredients of PFPE liquid is recognized by the Cosmetics Association
- There are some PFPE lubricating oil and grease is recognized by the food standard

The characteristics and applications of Perfluorinated Grease

Micron film impregnation technology



Invincible performance in extreme environments

Yamabala's series of high-performance lubricants and raw materials are carefully developed and manufactured using the most advanced PTFE and PFPE fluorinated polymer technology. Its product types include fluorinated liquids, lubricating oils, lubricating greases, lubricating pastes and low-friction coatings. This series of products has a unique combination of characteristics, specially designed for use in extremely harsh working environments, to replace general lubricants for harsh working conditions and extreme working temperatures, in order to achieve extended lubricant and machine life. It has become an indispensable product for high-tech advanced lubrication.

-  Chemical industry
-  Aerospace Industry
-  Packaging industry
-  Textile industry
-  Food industry



-  Auto industry
-  Steel manufacturing industry
-  Maritime, port and mining industries
-  Electronic Industry
-  General industry

Product Selection Guide



Lubricants suitable for successful application in high vacuum environments are required to have unique properties. They must have an extremely low vapour pressure, be non-migratory and possess good low-temperature properties. Conventional lubricants evaporate rapidly when subjected to vacuum environments, a phenomenon known as "out-gassing".

This rapid evaporation not only leads to premature lubricant depletion, the vaporised materials may also condense on precision components, delicate mechanical devices or semiconductor wafers, contaminating the application. Some conventional greases can vaporise rapidly under high vacuum creating a vapour cloud in the chamber. Other materials, such as silicone, vaporise more slowly, but can still lead to contamination problems through their tendency to migrate.

Once a chamber has been contaminated, it is extremely difficult to clean, and could contaminate equipment that is subsequently placed into the chamber. Yamabala lubricant oil and grease also universally compatible with elastomers and plastics and are used to lubricate "O" rings and seals in vacuum environments.

Yamabala lubricants for high vacuum are designed to eliminate the problems associated with outgassing, and are available with vapor pressures lower than 10^{-15} torr at 25°C.



High Temperature

KY1106	SF7430
KY2182S	SF7383
KY3235	SF7398
KY1230	SF7848
KY1237	SF7898



High Loading

KY3235	SF7380N
KY1237	SF7898



High Speed

KY1200	SF6013B
KY7101	SF7403
KY2182S	
MB19	
KY1201	
KY7202	



Low Noise

KY1108	SF7403
KY1202	SF6013B
KY3201	SF8803
KY1201	
KY1203	



Low Temperature

KY2010	SF9010
KY7102	SF6013
KY7104	SF7505
KY7101	SF9970
KY7103	
KY7201	



Water Proof

KY7104	KYF系列
KY1110	SF系列
KY2182S	
KY1204	



Chemical Resistance

KY7104	KYF系列
	SF系列



Resistant to Plastic

KY1207	KYF系列
KY1230	SF系列
KY1106	
KY3230	



General Purpose

KY1102	SF7445
KY1103	
KY1109	
KY2182S	

Recommend YAMABALA grease by application



CAR

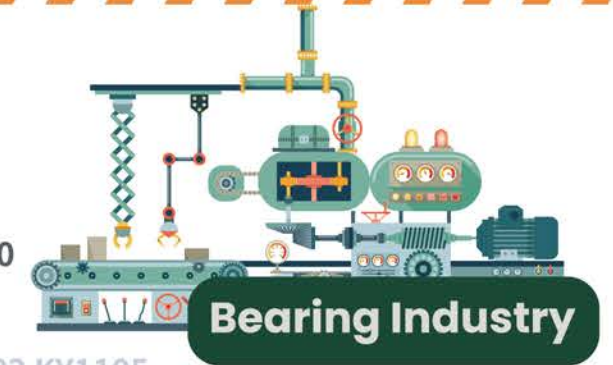
Motor: KY7100 / KY7110 / KY7101 KY7105 KY7512
Axle: KY7010 KY7880 KY3201 SF9970 SF8810 SF8820

STEEL

Continuous casting, heating furnace: KY3600 KY3602 KY1105
Hot rolling equipment: KY1103 KY3216 KY3226 SF7898 SF7588
Cold rolling equipment: KY7003 KY7006 KY3233 KY8200 KY3216

OTHER

KY2182S KY7301 KY7015 KY1132 KY1106 KY1109

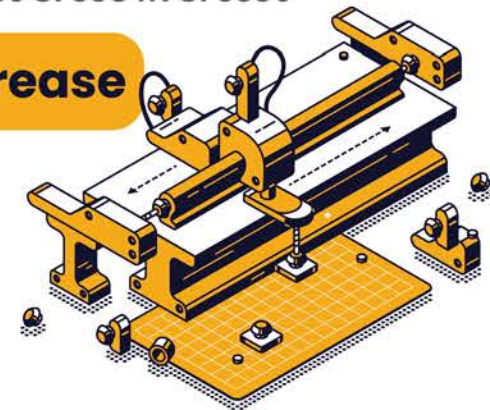


Gear Industry



Gear Motor: KY5530 KY7610 KY7616 AE00 KY3100
Planetary Gear: KY7677 KY1201
Reduction Gear: KY3102 KY1109 KY4241 KY3216 AE00 KY3100
Mechanical Arm: KY3300 KY3400 KY3338 SK1A MOLYWHITE RE00
VIGOGREASE RE0
SF8810 SF8820 SF9980 SF9984N SF9990

Linear Motion Grease



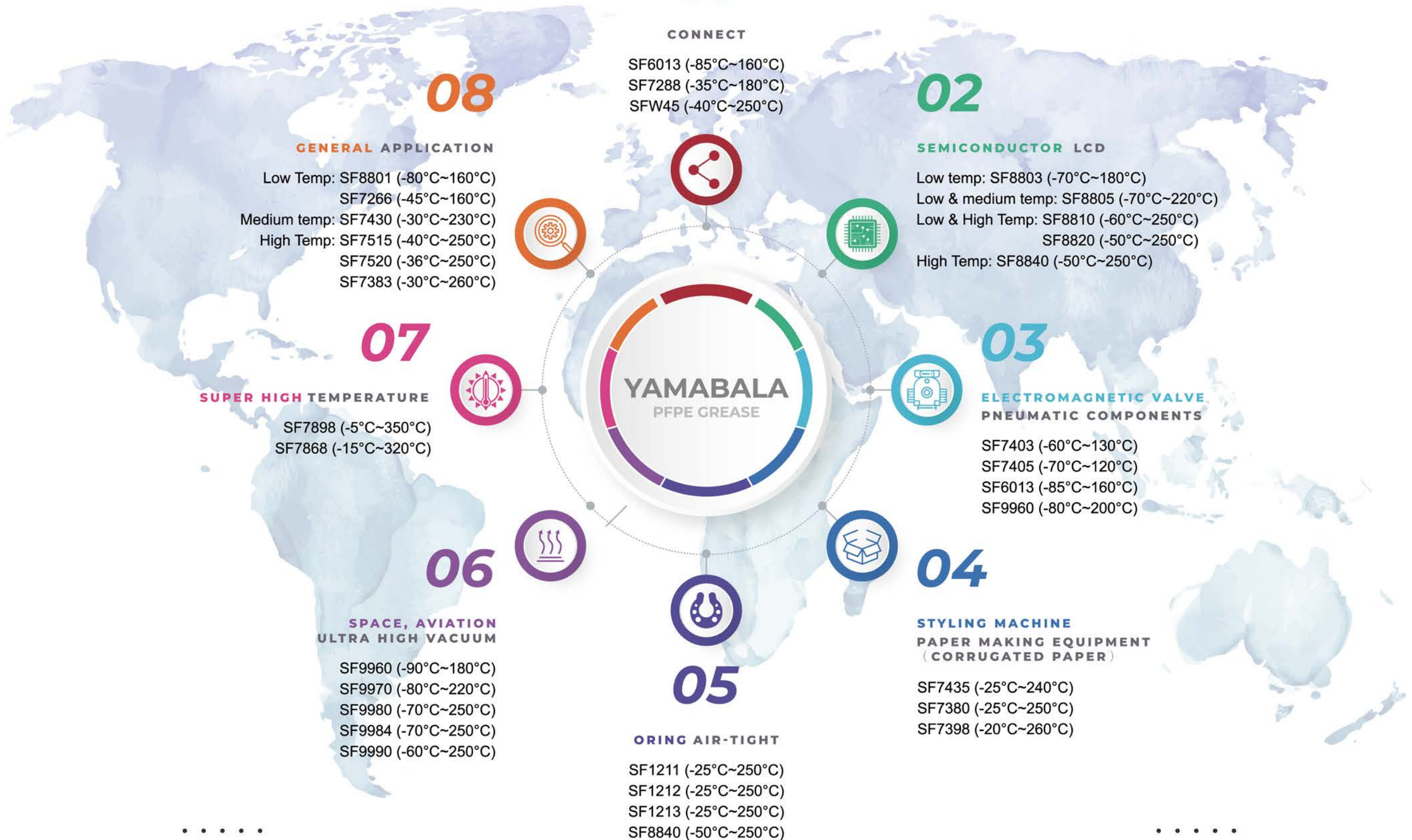
Dust-free 1001 or more: KY3201 KY1108
Dust-free below 1000: KY1202 KY7102 KY1201 KY1203
MB19 KY3205
special environment: MB19 KY1204 SF系列 KYF系列
Cleanroom Grease: KY1200 KY1201 KY1202 KY1203 MB19
KY7201 KY7110

Sliding Grease



Metal - Metal: KY1103 KY5520 KY5540 KY7310 KY3320
KY3250 KY3318 KY3301 KY3310 KY3307
Metal-Resin: KY5520 KY5540 KY3240 KY3317 KY1207
KY3260 KY3307 KY3401 KY3220 KYF系列 SF系列
Resin - Resin: KY1207 KY3305 KY3301 KY3260 KY3310
KY3307 KY3401 KY3220 KYF系列 SF系列
Rubber: KY3230 KY3317 KYF系列 SF系列
Non-ferrous Metal: KY7600 KY7601 KY7602 KY7603 KY7604

Recommend YAMABALA grease by application



Recommend YAMABALA grease by application

PFPE GREASE MULTIPURPOSE HIGH TEMPERATURE PERFLUORINATED GREASE



Resistant to steam, heat, high temperature, general chemicals, has a strong anti-wear performance, will not corrode the material, extend the service life of bearings and gears, reduce maintenance time, lower maintenance labor intensity. This product is an excellent choice for corrosive environment.

Use: Automotive bearings, Spark plug film, ABS sealed bearing lubrication, Car paint conveyor chain conveyor bearing, Sealed pump bearing, Motor bearing and ordinary bearing, Electronic SMT machinery and equipment, papermaking, Textile printing and dyeing hot air motor.

Remarks: Packaging specifications can be customized according to customer needs; syringe (100g), tube (100g, 1oz, 2oz), syringe 800g, bellows 150g, can (1kg, 1LB).

YAMABALA SF 7430

-30°C~230°C

Resistant to steam, heat, high temperature, general chemicals, has a strong anti-wear performance, will not corrode the material, extend the service life of bearings and gears, reduce maintenance time, lower maintenance labor intensity. This product is an excellent choice for corrosive environment.

Use: Automotive bearings, Spark plug film, ABS sealed bearing lubrication, Car paint conveyor chain conveyor bearing, Sealed pump bearing, Motor bearing and ordinary bearing, Electronic SMT machinery and equipment, papermaking, Textile printing and dyeing hot air motor.

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

101

02

YAMABALA SF 7435

-25°C~250°C

Resistant to high temperature no dropping point grease, excellent adhesion, good stability, high waterproof, anti-corrosion, anti-wear and other features

Use: Various ball and roller bearing, or other pump bearing, medium high-speed and low-speed motor, and various low-speed plastic gear lubrication, P T A centrifuge differential bearing, automotive CV JOINT, fan clutch bearings, corrugated machine wave wheel.

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

—

YAMABALA SF 7515

-40°C~250°C

Semiconductor, vacuum pump equipment bearing lubrication (chemical resistant), Space vehicle, aeronautical navigation equipment, High-precision medical equipment and equipment lubrication.
20°C Vapor pressure
7.45 x 10⁻¹⁰ torr

03

Use: Single tile machine roller bearing, dyeing machine conveyor chain bearing, calender wave wheel bearing, high-speed spindle bearings of machine tool, Ball lead screw of machine tool, heat pump, plastic injection machine, Paint stove and drying stove transport roller bearings.

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

—

O-RING Airtight Oil

YAMABALA SF 1213

-25°C~250°C

A high viscosity anti-corrosion grease, with excellent lubrication durability, high temperature, oxidation stability
20°C Vapor pressure 6.4×10^{-13} torr
100°C Vapor pressure 5.6×10^{-8} torr

Purpose: Semiconductor clean room equipment lubrication and chemical process machines

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

Specially used for robotic arms and fab slide rails

YAMABALA SF 8820

-50°C~250°C

Provides excellent lubrication durability in high temperature environments, very low evaporation, high oxidation stability, and will not deposit or carbonize any deposits.
100°C Vapor pressure: 6.5×10^{-7} torr

Use: Semiconductor manufacturing equipment, Automotive industry, TFT-LCD, PVD, CVD process precision mechanical arm bearing, PFPE oil.

YAMABALA SF 6013B

-80°C~160°C

The only low torque high speed bearing special grease

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

YAMABALA SF 8810

-70°C~230°C

Very low evaporation, high oxidation stability, there will be no residue of any gel or carbonized sediment.
100°C Vapor pressure: 1.1×10^{-6} torr

Use: Semiconductor manufacturing equipment, Automotive industry, TFT-LCD, PVD, CVD process precision mechanical arm bearing, PFPE oil.

※AKT Specified vacuum grease.

YAMABALA SF 1211

-25°C~250°C

A high viscosity anti-corrosion grease, with excellent lubrication durability, high temperature, oxidation stability
20°C Vapor pressure 6.4×10^{-13} torr
100°C Vapor pressure 5.6×10^{-8} torr

Use: Semiconductor clean room equipment lubrication and chemical process machinery shaft, O-ring, High-precision medical equipment, Fuel nozzle, Flaps and ailerons starter bearing, aeronautical navigation equipment.

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

YAMABALA SF 8840

-50°C~250°C

Provides excellent lubrication durability in high temperature environments, very low evaporation, high oxidation stability, and will not deposit or carbonize any deposits.
100°C Vapor pressure: 6.5×10^{-7} torr

Use: Semiconductor manufacturing equipment, Automotive industry, TFT-LCD process precision mechanical arm bearing, PVD, CVD High speed High vacuum bearings.

Recommend YAMABALA grease by application

PFPE GREASE MULTIPURPOSE HIGH TEMPERATURE PERFLUORINATED GREASE



YAMABALA Industry develops special greases for various industries, and can also meet the customized needs of fluorine greases. We are your trustworthy partner in terms of expertise, experience and quality in lubrication.

Remarks: Packaging specifications can be customized according to customer needs; syringe (100g), tube (100g, 1oz, 2oz), syringe 800g, bellows 150g, can (1kg, 1LB).

Recommend YAMABALA grease by application

PFPE GREASE DYEING AND FINISHING PLANTS, CORRUGATED PAPER



YAMABALA Industry develops special greases for various industries, and can also meet the customized needs of fluorine greases. We are your trustworthy partner in terms of expertise, experience and quality in lubrication.

Remarks: Packaging specifications can be customized according to customer needs; syringe (100g), tube (100g, 1oz, 2oz), syringe 800g, bellows 150g, can (1kg, 1LB).

YAMABALA SF 7380

-25°C~250°C

Has excellent characteristics of resistant to high temperature corrosion, anti-chemical solvent erosion.

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

YAMABALA SF 7381

Use: Fluorine grease for high-temperature textile stereotypes, mechanical shaft of high temperature and high load, conveyor bearings such as stereotypes (conveyor belt rolling bearing), BOPP film extension conveyor rolling bearings, PTA centrifuge differential bearing, conveyor chain bearings high temperature baking stove.

YAMABALA SF 7392

Very long lubrication cycle in aggressive environments, can greatly extend the re-lubricating time, resistant decay in an aggressive environment, has higher temperature resistance than SF7380.

YAMABALA SF 7383

-30°C~260°C

Use: Lubricate any sliding surface, bolts, valves, bearing and spiral in lubricating machinery parts, grease suitable for high temperature stenter machine.

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

YAMABALA SF 7398

-20°C~260°C

Viscosity is higher than SF7380. Has excellent resistance to high temperature corrosion, anti-chemical solvent erosion characteristics.

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

YAMABALA SF 7393

Use: high temperature reflow oven and hot air motor bearing, corrugated machine, dyeing and finishing stenter machine bearing, mechanical shaft of high temperature and high load, conveyor bearings such as stereotypes (conveyor belt rolling bearing), BOPP film extension conveyor rolling bearings, PTA centrifuge differential bearing, conveyor chain bearings high temperature baking stove.

YAMABALA SF 9970

-80°C~210°C

It is an anti-corrosion ultra-high vacuum fluorinated grease. Its base oil is a very stable direct-locking fluorinated polymer liquid thickened with PTFE. SF9970 ultra-high vacuum fluorocarbon grease has excellent lubrication durability, extremely low evaporation rate, oxidation stability and a wide operating temperature range. Representative uses include mechanical and electronic mechanical equipment operating in extreme temperatures and corrosive environments. Vapor pressure at 40°C 3.7×10^{-7} torr

Applications: Low-temperature refrigeration devices, optical equipment, precision instruments, clean rooms, semiconductors, military aerospace, food, paint production lines, electronic contacts, space satellites, aviation-related machines, various vacuum machines and other driving parts

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

YAMABALA SF 9984

Perfluorinated grease suitable for ultra-high vacuum and clean rooms. Designed with a narrower range of perfluorinated molecular weight than SFC9588, it has no evaporation rate at 140°C, a vapor pressure of 10^{-9} torr at 120°C, and a vapor pressure of 10^{-7} torr at 160°C. SF9984N has excellent lubrication durability, oxidation stability and a wide operating temperature range. This product combines the properties of a series of modified additives to ensure that it is the lubricant of choice for a wide range of demanding applications. Vapor pressure at 20°C 1.6×10^{-14} torr
Vapor pressure at 140°C 7.5×10^{-8} torr

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

-70°C~250°C

Purpose: equipment lubrication in semiconductor clean rooms, semiconductor equipment and chemical process mechanical shafts or oil seals (O-RING), high-precision medical equipment and equipment, robotic arms L/M GUIDE/SCREW, low evaporation vacuum grease, aerospace industry Specially used for turbines, fuel nozzles, flap and aileron starter bearings, space vehicles, aerospace navigation equipment, TFT/LCD, PVD&CVD vacuum slide rails

YAMABALA SF 9990

-60°C~250°C

It is an ultra-high vacuum fluorinated grease whose base oil is a very stable direct-locking fluorinated polymer liquid thickened with PTFE. SF9990 has excellent lubrication durability, extremely low evaporation rate, oxidation stability and a wide operating temperature range. Representative uses include mechanical and electronic mechanical equipment operating in extreme temperatures and corrosive environments. SF9990 This product combines a series of improved properties to ensure that this product is the best lubricant for many demanding applications.

Vapor pressure at 20°C 1.1×10^{-16} torr
Vapor pressure at 160°C 2×10^{-8} torr

Applications: Low-temperature refrigeration devices, optical equipment, precision instruments, clean rooms, semiconductors, military aerospace, food, paint production lines, electronic contacts, space satellites, aviation-related machines, various vacuum machines and other driving parts.

Recommend YAMABALA grease by application

ULTRA HIGH VACUUM FLUORINE GREASE SPECIAL GREASE FOR SEMICONDUCTOR, PANEL AND AEROSPACE INDUSTRY



YAMABALA Industry develops special greases for various industries, and can also meet the customized needs of fluorine greases. We are your trustworthy partner in terms of expertise, experience and quality in lubrication.

Remarks: Packaging specifications can be customized according to customer needs; syringe (100g), tube (100g, 1oz, 2oz), syringe 800g, bellows 150g, can (1kg, 1LB).

Recommend YAMABALA grease by application

Contact grease

Special fluorine-containing grease for contact switches

YAMABALA SF 8810

-65°C~250°C
Vacuum degree 20°C 1.4X10⁻⁸ TORR

YAMABALA SF 7288

-35°C~180°C
Vacuum degree 20°C 1.4X10⁻⁶ TORR

YAMABALA SF W45

-35°C~250°C
Vacuum degree 20°C 1.4X10⁻⁶ TORR

Can (1LB, 1KG)
Tube (100G)
Syringe (100G)

Low dust grease

Special grease for CLEANROOM & FAB

YAMABALA KY1200

-60°C~130°C

YAMABALA KY 1203

-50°C~130°C

YAMABALA KY 1202

-50°C~130°C

YAMABALA KY 7201

-45°C~200°C

YAMABALA KY 1201

-50°C~150°C

YAMABALA MB 19

-45°C~200°C

YAMABALA KY 7110

-40°C~180°C

ASTM E595 OUTGASSING TEST

What is the ASTM E595 vacuum outgassing test?

Testing purposes —

The amount of volatiles released when a material is exposed to heat and vacuum in a vacuum system.

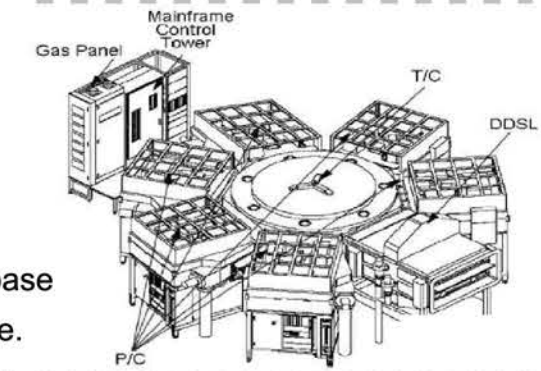
Measurement parameters —

- Total Mass Loss; TML
- Collected Volatile Condensable Materials ; CVCM%
- The amount of Water Vapor Regained ; WVR

TML (< 1%) , CVCM (< 0.1%)

Distillation and evaporation rates

1. When the molecular weight range of the base oil is wider, the base oil is more volatile and the lighter molecules are easy to evaporate.
2. Through a special distillation process, lighter molecular weights are removed during the lubricant manufacturing process instead of waiting for them to volatilize and contaminate during work.
3. SFC9599 is designed with a better molecular weight range than SFC9588.
4. SF9599N has no evaporation rate at 149°C, vapor pressure reaches 10⁻⁹ torr at 120°C, and 10⁻⁷ torr at 160°C.
5. SF9599N has no evaporation rate at 149°C, which is better than the slow evaporation of general fluorine lubricating grease. It has better performance in high temperature and ultra-high vacuum conditions.



Clean rooms provide excellent lubrication durability and freedom from outgassing.



SGS 半導體超微量分析中心
Ultra Trace Analysis Service Center of Semiconductor

Contact with SGS
www.sgs.com.tw

Test Report
REPORT NO.: DNS22900526M01 Date: 2022/10/14 Page: 1 of 2

YAMABALA INDUSTRY CORP.
NO. 11, LN. 83, LONGSHOU ST., TAOYUAN DIST., TAOYUAN CITY 330, TAIWAN (R. O. C.)

The following sample(s) was/were submitted and identified by/on behalf of client as:

Sample Name : PFPE GREASE
Applicant : YAMABALA INDUSTRY CORP.
Item No : SFC9588 GREASE
Date of Received : 2022/09/30
Date of Testing : 2022/09/30 ~ 2022/10/14

Test Item	Test Method	Test Results				LOQ/LOD	Unit
		001	002	003	Avg.		
total mass loss	With reference to ASTM E595-15 method. Analysis was performed by balance.	0.0855	0.0966	0.0830	0.0883	0.0100	%(w/w)
collected volatile condensable materials		0.0389	0.0303	0.0296	0.0328	0.0100	%(w/w)
water vapor regained		0.0202	0.0246	0.0111	0.0186	0.0100	%(w/w)

PFPE OIL

Superior performance in extreme environments

- ▶ Extreme thermal stability
- ▶ Chemically inert and resistance
- ▶ Microbial inert
- ▶ Low evaporation loss
- ▶ Low friction coefficient
- ▶ Maintain Flexible when Below pour point
- ▶ Excellent wear resistance
- ▶ Not dissolution in common solvents and fuels
- ▶ High Viscosity Index (<300)
- ▶ Non-carbonising
- ▶ High Viscosity Index
- ▶ Non-flammable, Will not promote or support combustion
- ▶ Low vapor pressure
- ▶ Wide working temperature range
- ▶ Excellent electrical characteristics
- ▶ Non-toxic
- ▶ Non-conversion, very suitable for Painting Spray Booth and Automotive production
- ▶ Excellent low temperature Starting torque

Application areas

- ▶ Textile industry-stenter machine
- ▶ Missile ejection system
- ▶ Emergency brake buffer device (ABS braking system)
- ▶ Vacuum pump sealing liquid
- ▶ Nuclear energy industrial sealed-for-life, maintenance-free bearings
- ▶ Buoy
- ▶ Outer space rocket nozzle lubrication
- ▶ Sintered metal bearings need excellent working life
- ▶ Oxygen and chlorine valves and pumping system
- ▶ Gold contact surface lubrication
- ▶ Instrument lubricants
- ▶ Bearings exposed at hot, humid and corrosive chemicals environment
- ▶ Semiconductor, panel, high vacuum ultra-clean room process



Yamabala® PFPE OIL

ITEM	204°C 22hrs evaporation loss ASTM D 2595	Base oil viscosity 40°C/100°C	VI index	Operating temperature	Vapor Pressure			
					20°C	40°C	100°C	200°C
KYF1512	18	25 / 4.5	75	-50°C~140°C	8*10 ⁻⁷	—	3*10 ⁻³	—
KYF1516	1.6	- / 20	120	-30°C~210°C	—	—	—	—
KYF1518	1.1	- / 36	135	-25°C~240°C	—	—	—	—
KYF1525	0.8	- / 40	145	-25°C~260°C	—	—	—	—
KYF1210	0.8	- / 210	210	-50°C~240°C	—	4.33*10 ⁻⁹	2.73*10 ⁻⁷	—
KYF1300	0.45	- / 280	205	-35°C~250°C	—	5.03*10 ⁻⁹	3.29*10 ⁻⁷	—
KYF6010	6	19 / -	260	-80°C~180°C	—	—	—	—
KYF6015	2.5	90 / -	290	-70°C~200°C	—	—	—	—
KYF6030	0.6	160 / -	340	-60°C~230°C	—	5.3*10 ⁻⁸	1.1*10 ⁻⁶	—
KYF6060	0.3	300 / -	350	-60°C~245°C	—	—	—	—
KYF7490	0.27	700 / -	380	-25°C~260°C	—	1.7*10 ⁻⁸	6.5*10 ⁻⁶	—
KYF8125	0.4	360 / -	360	-65°C~220°C	—	3.1*10 ⁻¹²	—	3.4*10 ⁻⁶

Yamabala® Special purpose fluorinated solvents

- SKII The special solvent for clean fluorinated oils on mechanical bearings.
- SKRP Long-term bearing cleaning and rust inhibitor.
- SKRPP A specially designed solvent for bearing not filled grease yet, but application need to fill fluorine grease.

Remarks: Packaging specifications can be customized according to customer needs; 100g, 1LB, 1kg