

# AYGNC LUBRICANTS

2025





### **BUILD FUTURE**

### INTRODUCTION IIIIIII



AYGNC Lubricants was established in 2020 under AYGNC Group, founded in 1993.

Built on strong international trade and engineering experience, we manufacture high-quality lubricants and export to several countries, primarily Bulgaria, Montenegro, and Iraq.

We also offer private label production services for our business partners.

### **OUR HISTORY**





Since embarking on our journey in 2020, we have made successful ventures and continue to move forward with confidence.

2020	AYGNC Lubricants was founded.
2021	Supplying lubricants to Iraq.
2023	Operating in the Bulgarian market.
2024	Operating in the Montenearin market.

### **OUR TEAM**





Get to know our dynamic and competent team of experts.



GÜÇLÜ DEMİRCİ



**AHMET ÖZTURGUT** 



CAN EYÜBOĞLU



AYGEN DEMIRCI



**VEDAT AYDIN** 



ORHAN ÖZÇAKMAK



### **Shipment of Barrels**

,,,,,,,,

The barrels with standard volumes (205 lt.) are filled with approximately 180 kg. weighs. These barrels are prepared for more than one use, but there are cases where the barrels become damaged and unusable as a result of careless and abuse. To avoid damage to the barrels, never throw them away. This condition applies even if the barrels are dropped on soft ground, as the attachment points can be strained due to the impact. There are many methods for unloading barrels from trucks or from high places. Forklift and lift pallet carriers are some of them.

### **Storage of Bulk Oils**

If possible, place the bulk oil tanks in closed areas. However, if protection is provided from external factors such as rain, snow or high temperatures, there is nothing negative about the tanks being outside. Be sure to indicate the details such as the type and filling date of the goods in the tanks with labels. Coat the inner surfaces of the tanks where transformer oils and cooling system oils are stored with epoxy resin.

### **Stocking of Greases**

Stock up barrels containing soft grease (No. 0 and No. 1) vertically. Because the grease barrel mouths are larger, damages that may occur in the mouth during transportation may cause the grease barrel to leak.

### **Warehouse Location**

It is recommended to store the oils in a closed area and under not very hot conditions. However, sometimes this may not be possible. Under these conditions, keep the oils outside and definitely place them on the pallet. If possible, keep the barrels under the porch. However, in both conditions, the following points should be taken into consideration in the location of the warehouse.

- Trucks should be comfortable in and out.
- Ample space should be reserved for loading and unloading.
- There should be no oil, water and dust in the environment.
- Space should be reserved for empty barrels.





### **Storage Outside**

Some oils can be stored outside if they can be protected from very high temperatures. However, environments that are constantly exposed to sunlight in the summer or conditions where the temperature falls below 0°C can be harmful for oils. Some products cannot be stored outside.

- Transformer oils
- · Cooling system oils
- Paraffinic oils
- Greases
- Some of the cutting oils

When storing in the open, place the barrels upside down and keep them on the pallet. If it is stored horizontally, make sure that the oil caps are at 3 or 9 o'clock position. While the barrels are open, check if corrosion occurs at regular intervals. If corrosion has started in the barrels, make the necessary cleaning and take the barrels to a closed area immediately. If cans or small packages are kept open area, take precautions for corrosion. One of the best measures to prevent corrosion is to cover such materials with a cover.

### **Indoor Storage**

Indoor storage is always preferred. Generally, the temperature in closed areas does not decrease much. However, furnaces that cross steam lines or are near the warehouse may cause the storage temperatures to rise. In this case, there may be a risk of degradation in oils that are kept in heat for a long time. Remove this risk with proper ventilation and measures to be taken.





### **Use of Oils According to Health and Safety Rules**

As long as they are used for their intended purpose, mineral oils do not harm human health or are negligible. The most important issue to be considered in the use of oils is to prevent skin and eye contact and not to breathe oil vapors.

### General Recommendations

- In cases where oil contact with the skin is frequent and continuous, consult a doctor about abnormalities in the skin.
- When using pumps that grease with high pressure, do not neglect the accidents that cause the grease to leak under the skin and get medical help immediately.
- Do not use oils specified to contain lead in spray lubrication systems.
- Keep equipments such as oiler, grease nipple at hand at all times in order to apply oil easily.

### **Precautions for a Healthy Environment**

In cases where mineral oils are used, it is beneficial to take the following precautions in order to provide a healthier environment.

- Be careful to use gloves at every point where contact with oil is unavoidable.
- Make covers, guards or shields to prevent oil spills.
- Ensure that people who come into contact with oil can easily wash their hands and have washbasins with non-alkaline soaps at any time.
- Always keep a first aid kit in every work environment.
- Check the working environment at regular intervals and if there are any deficiencies in the applications recommended above, correct them immediately.





### **Health and Safety Rules**

It is beneficial to take the following precautions to prevent workers who come into contact with oil from taking any risks.

- Always use gloves in constant contact with oil.
- Wear suitable clothing to prevent skin contact with oil.
- Do not put hand tools, cloths and rags contaminated with oil in pockets, especially trouser pockets.
- Before eating or before the toilet, carefully clean hands with soap.
- Never use solvents such as kerosene, gasoline, hexane for cleaning.
- Do not wear work clothes contaminated with too much oil without cleaning. Wash work clothes regularly.

### **ENGINE OIL** CLASSIFICATION //////// **INDEX TABLE**





### SAE J300 Engine Oil Classification

SAE sc s ss	(°C) s sc s <sup>(1)</sup> mPa.s Max.	C) sc s <sup>(2)</sup> , mPa.s Max.	100 °C'de c sc s <sup>(3)</sup> (mm²/s) Min.	100 °C'de c V sc s <sup>(3)</sup> (mm <sup>2</sup> /s) Max.	sc s <sup>(4)</sup> (mPa.s) 150°C ve 10 <sup>6</sup> s-1 Min.
0W	6200 at -35	60000 at -40	3,8	-	•
5W	6600 at -30	60000 at -35	3,8	-	
10W	7000 at -25	60000 at -30	4,1	-	
15W	7000 at -20	60000 at -25	5,6	-	
20W	9500 at -15	60000 at -20	5,6	-	
25W	13000 at -10	60000 at -15	9,3	-	
20	-	-	5,6	<9,3	2,6
30	-	-	9,3	<12,5	2,9
40	-	-	12,5	<16,3	2,9 (0W-40, 5W-40 ve 10W-40
40	-	-	12,5	<16,3	3,7 (15W-40, 20W-40, 25W-40, 40)
50	-	-	16,3	<21,9	3,7
60	-		21,9	<26,1	3,7

 $1 \text{ mPa.s} = 1 \text{ cP} \qquad 1 \text{mm}^2/\text{s} = 1 \text{ cSt}$ (1) ASTM D 5293, (2) ASTM D 4684, (3) ASTM D 445, (4) ASTM D 4683, CEC L-36-A-90 (ASTM D 4741)

### VISCOSITY INDEX TABLES





### **Industrial Oils ISO Viscosity Classification**

ISO Visc s ss	Kinema c Viskozite 40 °C'de cSt	Kinematic Viscos Limits 40ºC'de cSt		
		Min.	Max.	
2	2.2	1.98	2.42	
3	3.2	2.88	3.52	
5	4.6	4.14	5.06	
7	6.8	6.12	7.48	
10	10	9.00	11.0	
15	15	13.5	16.5	
22	22	19.8	24.2	
32	32	28.8	35.2	
46	46	41.4	50.6	
68	68	61.2	74.8	
100	100	90.0	110	
150	150	13.5	165	
220	220	198	242	
320	320	288	352	
460	460	414	506	
680	680	612	748	
1000	1000	900	1100	
1500	1500	1350	1650	

### **Automotive Gear Oils SAE Viscosity Classification**

SAE Viskozit ss		150000 Cp sc s	sc s s c	
Kış	Yaz	êC.	Min	Max
75 W	-	-40	4.1	-
80 W		-26	7	3 (5)
85 W	-	-12	11	-
	90	8.73	13.5	24
0.00	140	(0*)	24	41
+	250	*	41	

### Industrial Gear Oils AGMA Classification

1 1	ISO	55 5
AGMA No.	Visc s ss	AGMA No.
1	46	
2	68	2 EP
3	100	3 EP
4	150	4 EP
5	220	5 EP
6	320	6 EP
7	460	7 EP
8	680	8 EP
8A	1000	8A EP

#### **NLGI Penetration Classification of Greases**

NILGI No.	C SS	
0	355-385	
1	310-340	
2	265-295	
3	220-250	
4	175-205	
5	130-160	
6	85-115	

### AYGNC 15W-40 CI-4





Technical specifications			
Physical property	Method	15W/40	
Density, g/cm³, 15*C	ASTM D 1298/TS 1013 EN ISO 3675	0,885	
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	112,2	
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	14,7	
Viscosity Index	ASTM D 2270/TS 30961SO 2909	135	
Pour Point, °C, max.	ASTM D 97/TS ISO 3016	-24	
Flash Point, °C, min	ASTM D 92 /TS EN ISO 2592	230	
Total Base Number, mg KOH/g	ASTM D 2896	10	

### For Heavy Duty Conditions Verified Performance

- **Definition:** Extra-performance diesel oil meeting top manufacturer requirements, improving high & low mileage engine performance.
- **Usage:** For non-DPF diesel engines in light/heavy-duty vehicles for construction, mining, and transport.
- **Benefits:** New additives protect from wear under heavy load, prevent sludge, lower maintenance, keep performance over full change interval, ensure quick lubrication in cold starts.
- **Performance:** Meets ACEA E7, API CI-4/SL, CAT ECF-2, Cummins CES 20078/77/76, Global DHD-1, Mack EO-M Plus, EO-N, MAN M 3275-1, MB 228.3, MTU DDC Type 2, Renault RLD-2, Volvo VDS-3, Q8, Deutz DQC III-10.









### **AYGNC 15W-40 CF-4**





Physical property	Method	15W/40
Density, g/cm³, 15°C	ASTM D 1298/TS 1013 EN ISO 3675	
Kin. Viscosity, cSt,	ASTM D 445/TS 1451 EN ISO 3104	
Kin. Viscosity, cSt,	ASTM D 445/TS 1451 EN ISO 3104	
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	135
Pour Point,*C, max.	ASTM D 97/TS ISO 3016	-27
Flash Point, *C, min	ASTM D 92 /TS EN ISO 2592	230
Total Base Number, mg KOH/g	ASTM D 2896	10

# In High Mileage Heavy Commercial Vehicles Effective Protection

- **Definition:** Diesel engine oil with modern additives and quality base oils, for naturally aspirated or turbocharged diesel engines of heavy commercial vehicles; keeps engine clean and gives strong protection, especially for high-mileage vehicles.
- **Usage:** For naturally aspirated or turbocharged diesel engines in all weather and road conditions.
- **Benefits:** Protects from abrasion at first start, keeps parts clean to extend life, and lowers maintenance costs in high-mileage heavy-duty vehicles.
- Performance: API CF-4.









### AYGNC 20W-50





### Technical specifications

Physical property	Method	20W-50
Density, g/cm <sup>3</sup> , 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,89
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	172
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	19,5
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	130
Pour Point, °C, max.	ASTM D 97/TS ISO 3016	-21
Flash Point, *C, min	ASTM D 92 /TS EN ISO 2592	240
Total Base Number, mg KOH/g	ASTM D 2896	10

# In High Mileage Heavy Commercial Vehicles Effective Protection

- **Definition:** Diesel engine oil with modern additives and quality base oils, safe for heavy commercial vehicles in construction, transportation, and agriculture; keeps engine clean and offers strong protection, especially for high-mileage vehicles.
- **Usage:** For naturally aspirated or turbocharged diesel engines of heavy commercial vehicles in construction, transportation, and agriculture.
- **Benefits:** Protects from abrasion at first start, keeps engine clean to extend part life, and reduces maintenance costs in high-mileage heavy-duty vehicles.

• **Performance:** API CF-4.









### **AYGNC HD SERIES**





Technical specifications						
Physical property	Metat	HD 10W	HD.30	HD 40	HD SQ	HD 60
Color	Gözle	Light Brown	Light Brown	Brown	Brown	Brown
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	5,9	10,5	14,5	19	24
Kin, Wiscosity, cSt,	ASTM D 445/TS 1451 EN ISO 3104	36,7	90,1	151	228	330
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	100	95	90	90	90
Density, g/cm <sup>3</sup> , 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,878	0,885	0,889	0,895	0,901
Pour Point,*C, max.	ASTM D 97/TS ISO 3016	-27	-15	-12	-9	-3
Flash point, *C, min	ASTM D 92 /TS EN ISO 2592	198	200	220	235	255

### HIGH PERFORMANCE DIESEL ENGINE OIL

- **Definition:** High-performance single-season diesel engine oil with quality base oils and additives; use viscosity grade suited to seasonal conditions.
- **Usage:** For low-performance naturally aspirated diesel engines; also for some gearboxes, transmissions, and hydraulic systems if recommended by manufacturer.
- **Benefits:** Keeps engine clean with detergent/dispersant additives, extends part life, high thermal stability reduces soot/deposit, offers viscosity options for seasons.

• **Performance:** API CF/4.









### **AYGNC MONOGRADE SERIES**





Technical specifications				
Method	10	30	40	50
ASTM D 1298/TS 1013 EN ISO 3675	0,877	0,889	0,895	0,905
ASTM D 445/TS 1451 EN ISO 3104	32,8	90,1	146,3	220
ASTM D 445/TS 1451 EN ISO 3104	5,5	10,4	14,5	18,9
ASTM D 2270/TS 3096 ISO 2909	102	97	97	95
ASTM D 97/TS ISO 3016	-15	-12	-12	-9
ASTM D 92 /TS EN ISO 2592	220	230	240	250
	Method  ASTM D 1298/TS 1013 EN ISO 3675  ASTM D 445/TS 1451 EN ISO 3104  ASTM D 445/TS 1451 EN ISO 3104  ASTM D 2270/TS 3096 ISO 2909  ASTM D 97/TS ISO 3016	Method 10  ASTM D 1298/TS 1013 EN ISO 0,877  3675  ASTM D 445/TS 1451 EN ISO 32,8  ASTM D 445/TS 1451 EN ISO 5,5  ASTM D 2270/TS 3096 ISO 2909 102  ASTM D 97/TS ISO 3016 -15	Method         10         30           ASTM D 1298/TS 1013 EN ISO 3675         0,877         0,889           ASTM D 445/TS 1451 EN ISO 3104         32,8         90,1           ASTM D 445/TS 1451 EN ISO 3104         5,5         10,4           ASTM D 2270/TS 3096 ISO 2909         102         97           ASTM D 97/TS ISO 3016         -15         -12	Method         10         30         40           ASTM D 1298/TS 1013 EN ISO 3675         0,877         0,889         0,895           ASTM D 445/TS 1451 EN ISO 3104         32,8         90,1         146,3           ASTM D 445/TS 1451 EN ISO 3104         5,5         10,4         14,5           ASTM D 2270/TS 3096 ISO 2909         102         97         97           ASTM D 97/TS ISO 3016         -15         -12         -12

### HIGH PERFORMANCE DIESEL ENGINE OIL

#### **Definition**

They are highly refined paraffinic engine oils with high viscosity index, low carbon balance.

#### Usage areas

It can be used safely in all applications where additive-free oil is recommended.

### **Its Benefits and Advantages:**

Used in all applications where additive-free oil is recommended.

They have high oxidation and thermal stability.

They increase engine power and fuel efficiency. They reduce engine maintenance and operating costs.

Its viscosity index is high. They protect the engine against wear with the perfect film layer they form.

It is economical for use in light conditions.

#### **Performance**

Meets API CA / SA performance specification. It is TS 12330 approved.









### **AYGNC HYPOID 80W-90**





Physical property	Method	80W-90
Color Determination	ASTM D 1500/TS 1713 ISO 2049	Brown
Density, g/cm³, 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,895
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	17,4
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	189,4
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	98
Pour Point, °C, max.	ASTM D 97/TS ISO 3016	-24
Flash Point °C, min.	ASTM D 92 /TS EN ISO 2592	215

### GEAR OIL FOR AXES AND DIFFERENTIALS

#### **Definition**

They are high performance heavy duty automotive gear oils developed for operation in hypoid gear systems, at high speeds or at low speeds where torque is high. It works without any problem as the operating temperature expands.

### Usage areas

It is used in gear boxes and differentials, spiral, conical, hypoid gear systems of many vehicles such as automobiles, trucks, buses, light-duty commercial vehicles, agricultural vehicles and work machines in all seasons. They exceed the specifications of many car, commercial vehicle, truck and bus manufacturers.

#### Its Benefits and Advantages:

- It has multi-grade viscosity properties; It shows easy fluidity and superior performance at high temperatures.
- Contains anti-wear additive and extreme pressure (EP) additive; it protects the parts in the gear system very well.
- Contains additives that prevent rust, corrosion and foam formation, shows high performance.
- Is compatible with all sealing elements and extends the life of the oil and gasket materials.
- Its thermal stability and resistance to oxidation keep the gear system clean.
- It should not be used in synchronous gearboxes if API GL-5 standard is not recommended.

#### **Performance**

API GL-5 GL-5, ZF TE-ML 05A, 07A, 12A, 16B, 17B



### AYGNC HYPOID 85W-140





Physical property	Method	85W-140
Color Determination	ASTM D 1500/TS 1713 ISO 2049	Brown
Density, g/cm³, 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,905
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	28,7
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	431,0
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	95
Pour Point,*C, max.	ASTM D 97/TS ISO 3016	-18
Flash Point, °C, min.	ASTM D 92 /TS EN ISO 2592	222

### GEAR OIL FOR AXES AND DIFFERENTIALS

#### Definition

In hypoid gear systems; They are high performance heavy duty automotive gear oils developed to operate at high speeds or low speeds where torque is high. It works without any problems as the operating temperature expands.

### Usage areas

It is used in gearboxes and differentials, spiral, conical, hypoid gear systems of many vehicles such as cars, trucks, buses, light duty commercial vehicles, agricultural vehicles and construction equipment in all seasons. It meets the specifications of many car, commercial vehicle, truck and bus manufacturers.

#### Its Benefits and Advantages:

- It has multi-grade viscosity, easy fluidity at high temperatures, shows superior performance.
- Contains anti-wear additive and extreme pressure (EP) additive, protects the parts in the gear system very well.
- Contains additives that prevent rust, corrosion and foam formation, shows high performance.
- It is compatible with all sealing elements and extends the life of the oil and gasket materials.
- Its thermal stability and resistance to oxidation is high, it keeps the gear system clean.
- It should not be used in synchronous gearboxes if API GL-5 standard is not recommended.

#### **Performance**

API GL-5 GL-5, ZF TE-ML 05A, 07A, 12A, 16B, 17B



### **AYGNC EP SERIES**





Physical property	Method	EP 80W	EP 90	EP 140
Color	ASTM D 1500/TS 1713 ISO 2049	Brown	Brown	Brown
Density, g/cm3, 15°C'de	ASTM D 1298/TS 1013 EN ISO 3675	0,886	0,903	0,908
Kin. Viscosity, cSt, 100°C'de	ASTM D 445/TS 1451 EN ISO 3104	10,4	17,8	28,1
Kin. Viscosity, cSt, 40°C'de	ASTM D 445/TS 1451 EN ISO 3104	88	189	420
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	101	102	94
Pour Point, °C, max.	ASTM D 97/TS ISO 3016	-21	-18	-12
Flash Point, *C, min.	ASTM D 92 /TS EN ISO 2592	192	210	225

### HIGH PERFORMANCE GEAR OILS

#### **Definition**

It is produced with the latest technology by adding EP (extreme pressure), rust and corrosion preventive additive package to high quality base oils based on paraffinic.

### Usage areas

It is used in hypoid gear differentials and manual gearboxes operating under medium conditions.

### Its Benefits and Advantages:

- Thanks to the additives it contains, it prevents abrasion and protects the engine.
- · Contains antifoam additive; offers superior lubricating ability.
- It provides savings in repair costs thanks to its impermeability feature.
- Contains anti-wear additive and extreme pressure (EP) additive; it protects the parts in the gear system very well.
- Contains additives that prevent rust and corrosion formation; provides superior protection.
- Compatible with all sealing elements, felt and gasket extends the life of the materials.
- High thermal stability and resistance to oxidation; keeps the gear system clean.

#### **Performance**

API GL-4; MIL-L-2105, Mercedes-Benz 235.1, MAN 341 N, ZF TE-ML 02A, 17A





### AYGNC GEAR OIL SERIES





### **Technical specifications**

Physical property	Method	90	140	
Density, g/cm3, 15°C min	ASTM D 1298/TS 1013 EN ISO 3675	0,88	0,89	
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	13,5-24	24,0-41,0	
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	220	420	
Viscosity Index min.	ASTM D 2270/TS 3096 ISO 2909	90	90	
Pour Point,*C, max.	ASTM D 97/TS ISO 3016	-12	-9	
Flash Point, *C, min.	ASTM D 92 /TS EN ISO 2592	230	240	

### **GENERAL PURPOSE GEAR OILS**

### **Definition**

It is produced with high quality mineral base oils for use in gearboxes and differentials of automotive and industrial equipment where there is no excessive pressure.

### Usage areas

Since they do not contain excessive pressure additives, they are suitable for use in gear units, gearboxes and differentials that do not require heavy load.

### **Its Benefits and Advantages:**

- Provides superior protection against rust and corrosion.
- It provides economy in repair costs thanks to its impermeability feature.
- Compatible with all sealing elements; felt and gasket extends the life of the materials.
- High thermal stability and resistance to oxidation; keeps the gear system clean.

### **Performance**

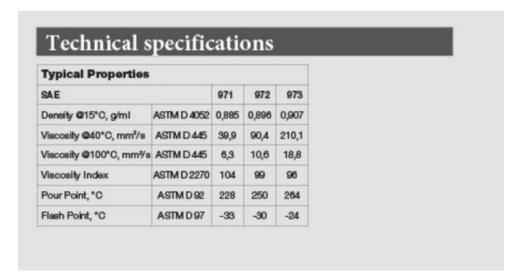
API GL-1



### AYGNC TMS OIL 970 SERIES







### FOR ENGINEERING MACHINES MULTIPURPOSE TRANSMISSION OILS

### Definition

It is a high performance gear oil developed for use in automatic or automatic / power shift transmissions, final drive units, oil-bathed brake and clutch systems of heavy duty construction equipment. It has been specially formulated for use in heavy and heavy-duty construction equipment of leading equipment manufacturers, especially Caterpillar.

#### Usage areas

It is suitable for use in automatic or automatic / powershift transmissions, final drive units, oil-bath braking systems and clutch systems of heavy duty construction equipment.

### **Its Benefits and Advantages:**

- Provides longer service life by reducing wear on transmission, final drive units and clutch systems thanks to its high load carrying capacity.
- Since it is compatible with the materials used in brake and clutch systems, it increases the working performance by reducing vibration and noise.
- Thanks to its special formula, it provides effective protection against pump wear in hydraulic systems due to high pressure.
- Thanks to its high thermal and oxidation stability, it increases the working efficiency by preventing the formation of residue.

#### **Performance**

ALLISON C-4 · CAT TO-4 · KOMATSU KES 07.868.1 · ZF TE-ML 03C







# MARINE ENGINE OILS



# AYGNC MARINE DIESEL ENGINE OIL SERIES





Physical property	3016	3020	3030	4020	4030	4040	5050	5070
Density, g/cm <sup>8</sup> , 15°C'de	0,895	0,896	0,896	0,902	0,905	0,910	0,910	0,915
Kin. Viscosity, cSt, 40°C'de	91,9	97,8	100,2	143,2	146,8	146,8	220	222
Kin. Viscosity, cSt, 100°C'de	11,3	11,5	11,2	14,5	14,6	14,6	18,9	18,8
Viscosity Index	110	106	98	100	98	98	96	95
Pour Point,*C, max.	-21	-18	-18	-18	-18	-18	-15	-15
Flash Point, *C, min.	240	240	240	250	250	250	260	260
Total Base Number, mgKOH/g	16	20	30	20	30	40	50	70

### Marine Diesel Engine Oil Series

#### **Definition**

They are marine diesel engine oils produced with the latest technology for the lubrication of low and medium speed marine engines and cylinders, working with heavy fuels, produced with a combination of high quality base oils with superior performance additives.

### **Usage areas**

It is used for the lubrication of marine engines and cylinders.

### **Its Benefits and Advantages:**

- Keeps the engine clean by preventing sediment and deposit formation by neutralizing the acid residues formed by high sulfur fuels.
- It allows the use of heavy fuels thanks to its high TBN.
- They protect the engine against wear with the perfect film layer they form.
- They prevent rust and corrosion on metal surfaces.
- They do not foam thanks to their anti-foam additive content.
- They have high oxidation and thermal stability.
- It preserves its chemical form and provides excellent performance under all conditions.

#### **Performance**

API CH4 - CF4 - CF and MIL-L-2104C





## AUTOMOTIVE SPECIAL PRODUCTS





### INDUSTRIAL OILS



### AYGNC ISO VG SERIES





### Technical specifications

Physical Property	Method	32	37	46	68	100
Density, g/cm <sup>3</sup> , 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,876	0,879	0,882	0,886	0,889
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	32	37	46	68	100
Kin. Viscosity, c5t, 100°C	ASTM D 445/TS 1451 EN ISO 3104	5,51	5,86	6,72	8,64	11,23
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	102	102	102	98	98
Pour Point *C, max.	ASTM D 97/TS ISO 3016	-27	-27	-24	-21	-21
Flash Point, *C, min	ASTM D 92 /TS EN ISO 2592	200	205	210	220	230

### SUPERIOR PERFORMANCE HYDRAULIC SYSTEM OILS

#### **Definition**

They are high quality hydraulic system oils obtained by blending mineral based base oils and oxidation, rust, wear and antifoam additives.

### **Usage areas**

Recommended for all industrial and mobile hydraulic systems, including high pressure.

### **Its Benefits and Advantages:**

- Prevents corrosion by protecting the system against abrasion with the superior film layer it creates.
- $\bullet\,$  Provides superior performance with its excellent lubricity.
- They protect the system perfectly and reduce maintenance costs thanks to their anti-oxidation, abrasion, rust, corrosion and foam additives.
- In addition, thanks to the antifoam additive it contains, it prevents cavitation caused by foaming and keeps the system clean with its dispersant feature.
- It has the feature of easy separation from air and water.

### Performance

Denison HF-0, HF-1, HF-II, Eaton Vickers M-2950-S/I-286-S, Cincinnati Milacron P-68/P-69/P-70, DIN 51524 Part 2, JCMAS HK, US Steel 127, TS ISO



### AYGNC HIDROLIFE HVI SERIES

Viscosity Index Pour Point \*C, max.

Flash Point, °C, min





#### Technical specifications HVI 32 HV1 68 **Physical Property** HV1 46 HVI 100 ASTM D 1298/TS 1013 EN ISO 3675 0,872 0,876 0,88 Density, g/cm<sup>3</sup>, 15°C 0,887 Kin. Viscosity, cSt, 40°C ASTM D 445/TS 1451 EN ISO 3104 46 100 32 68 Kin. Viscosity, cSt, 100°C ASTM D 445/TS 1451 EN ISO 3104 6,34 8,35 11,27 15,29

ASTM D 2270/TS 3096 ISO 2909

ASTM D 97/TS ISO 3016

ASTM D 92 /TS EN ISO 2592

154

-33

200

158

-30

210

159

-30

220

159

-27

230

### HIGH VISCOSE INDEX HYDRAULIC OILS

#### **Definition**

They are hydraulic system oils with high viscosity index, formulated with quality base oils and carefully selected additives.

### Usage areas

It provides excellent protection in hydraulic systems operating in a wide temperature range and having severe operating conditions.

#### **Its Benefits and Advantages:**

- Provides a superior performance at first start and high temperature.
- It can be used safely in different climatic conditions with its high viscosity index.
- Prevents corrosion by protecting the system against abrasion with the superior film layer it creates.
- Provides superior performance with its excellent lubricating properties.
- They protect the system perfectly and reduce maintenance costs thanks to their anti-oxidation, abrasion, rust, corrosion and foam additives.
- In addition, thanks to the antifoam additive it contains, it prevents cavitation caused by foaming and keeps the system clean with its dispersant feature.
- It has the feature of easy separation from air and water.

#### **Performance**

Denison HF-0, HF-1, HF-II, Cincinnati Milacron P-68/P-69/P-70 (MAG 68, 69, 70), DIN 51524 Part 2 Part 3, VICKERS HP VANE PUMP TESTS, M 2950S, I-286S, JCMAS HK, US Steel 127, TS 11158



### AYGNC BORON OIL



0,88

26,7



# Technical specifications Physical Property Method Typical Rate Color (Concentrated) Yellow Color (Emulsion) Clear White P<sup>H</sup> (Emulsion) D-1287 8,5

ASTM D 1298/TS 1013 EN ISO 3675

ASTM D 445/TS 1451 EN ISO 3104

### **CUTTING FLUID MIXED WITH WATER**

Density, g/cm3, 15°C'de

Kin. Viscosity, cSt, 40°C'de

#### Definition

It is a high performance cutting fluid that is produced with the addition of high performance additives and emulsifiers to quality base oils and gives a milky white emulsion when mixed with water.

### Usage areas

In all kinds of cutting processes; such as machining by turning, drilling and hot drawing of aluminum bars; it can be used as a lubricant and coolant.

#### **Its Benefits and Advantages:**

- Provides excellent cooling and lubrication in all kinds of cutting processes.
- Thanks to the high quality additive it contains, it protects your system against rust and corrosion and extends the life of your cutting tool.
- With its cleaning feature, it ensures that the processed surface is clean and smooth.
- It prevents the formation of smoke and odor.
- It prevents the formation of mold, bacteria and odor with the additives it contains.

### Performance

TS 11299

#### **Mixing**

Take the specified amount of water (95%) into a clean mixing tank and slowly add the oil (5%) with mixing. Make sure that mixing is not too fast. Never add water to oil. The optimum PH range of the mixture is between 8.0-9.5.



### AYGNC BLEND OIL





Physical property	Method	Rate
Density 15°C, g/cm <sup>3</sup>	ASTM D 1298/TS 1013 EN ISO 3675	0,863
Kin. Viscosity 40°C, cSt	ASTM D 445/TS 1451 EN ISO 3104	18
Kin. Viscosity 100°C, cSt	ASTM D 445/TS 1451 EN ISO 3104	3,7
Viscosity index	ASTM D 2270/TS 3096 ISO 2909	100
Pour Point °C	ASTM D 97/TS ISO 3016	-15
Flash Point °C	ASTM D 92 /TS EN ISO 2592	200
Emulsion pH	D-1287	7,4
Emulsion Appearance		Clear White

### SUPERIOR PERFORMANCE BLEND OIL

### **Definition**

It is a superior performance blending oil produced by adding special performance emulsifiers to mineral base oils.

### Usage areas

It can be used safely in the cotton and wool fabric industry, in spinning machines.

### **Its Benefits and Advantages:**

- It makes emulsion easily with water. (Usage rate 15% blending oil, 85% lime-free water)
- Easily separated from fabric and yarn when washed.
- Provides easy washing and combing of the yarns.
- It reduces static electricity build-up on yarn and fabric.



# AYGNC HEAT TRANSFER OIL





Technical specifications						
Physical Property	Method	32	46	68		
Density, g/cm³, 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,875	0,88	0,88		
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	32	46	68		
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	5,8	7,5	8,7		
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	103	103	99		
Pour Point,*C, max.	ASTM D 97/TS ISO 3016	-18	-15	-15		
Flash Point, *C, min	ASTM D 92 /TS EN ISO 2592	225	225	235		
Copper Strip Corrosion	ASTM D 130/TS 2741 EN ISO 2160	1a	1a	1a		
Rust Test		Pass	Pass	Pass		

### SUPERIOR PERFORMANCE HEAT TRANSFER OIL

#### **Definition**

Superior transfer oil, produced with the addition of high performance package additives to quality base oils, is a high quality heat transmission oil with low vapor pressure, high oxidation resistance and thermal stability, prepared for operating temperatures from -20°C to +290°C in closed systems. It should not be used above 160°C in open systems.

### Its Benefits and Advantages:

- It is a low viscosity, light yellow oil, very resistant to oxidation and thermal cracking.
- It is an economical product with a long service life.
- Circulation capability is perfect in usage range temperature.
- Depending on the thermal conductivity, the heat transfer rate is high.
- It is an excellent product due to its low volatility, comfortable fluidity at all temperatures, low corrosion property and very good heat transfer properties.
- Contact temperature on heater surfaces is max. (film temperature) may rise up to 290°C.
- The closed system must have an expansion vessel of suitable capacity, open to the atmosphere.
- When oil is added to the system for the first time, it should be paid attention that there is no foreign matter and especially water in the system.



# AYGNC COMPRESSOR OIL





Fiziksel Özellik	Method	32	46	68	100
Color	ASTM D 1500/ TS 1713 ISO 2049	1	1	1,5	2,5
Density, g/cm <sup>2</sup> , 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0.871	0.879	0.882	0,885
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	5,5	6,7	8,5	11,5
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	32	46	68	100
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	103	100	100	98
Pour Point,*C, max.	ASTM D 97/TS ISO 3016	-27	-24	-21	-15
Flash Point, *C, min	ASTM D 92 /TS EN ISO 2592	170	180	190	220
Copper Strip Corrosion, Cu.3h/100°C	ASTM D 130/TS 2741 EN ISO 2160	No.1	No.1	No.1	No.1

### SUPERIOR PERFORMANCE COMPRESSOR OIL

#### Definition

They are high performance mineral based compressor oils produced with high quality base oils and high quality additives.

### **Usage areas**

It is used in rotary type compressors, reciprocating, rotary-screw, palletized, moving or fixed special heavy duty compressors with high output temperature.

### **Its Benefits and Advantages:**

- Provides superior protection against abrasion with the help of the high-strength film layer it creates.
- It shows high resistance to oxidation and thus extends the service time.
- Their thermal resistance is high.
- It minimizes oil loss with its low evaporation feature.
- Provides high degree of protection against rust and corrosion.
- It has easy separation from air and water.
- It is compatible with seals and prevents the formation of deposits.

### **Performance**

**DIN 51506 VDL** 



### AYGNC SLIDE OIL





### Technical specifications

Physical property	Method	32	46	68	100	220
Density, g/cm <sup>3</sup> , 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,869	0,872	0,88	0,883	0,889
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	32	46	68	100	220
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	5,4	6,7	8,6	11,1	18,9
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	101	98	97	96	96
Pour Point, C, max.	ASTM D 97/TS ISO 3016	-15	-15	-12	-12	-9
Flash Point, *C, min	ASTM D 92 /TS EN ISO 2592	215	220	225	235	250

### SUPERIOR PERFORMANCE SLIDE OIL SERIES

#### Definition

They are high performance slideway oils produced by carefully blending quality mineral base oils with the addition of EP additives, which give adhesiveness together with high performance additives.

### Usage areas

It can be used in horizontal and vertical slides of all kinds of machine tools and also in hydraulic systems of the machines if recommended.

### **Its Benefits and Advantages:**

- Thanks to the adhesive additive it contains, it adheres well to metal surfaces and provides excellent lubrication by preventing leakage and eliminating noise.
- Provides vibration-free motion thanks to its high sliding feature.
- It minimizes friction under high pressure, creates a good film layer on the slides.
- Thanks to the package additive it contains, it prevents oxidation, abrasion, corrosion and foam formation, extends the oil change period, reduces service costs and thus reduces maintenance costs.
- It minimizes the corrosive effect left by high pH cutting fluids on the surface. Also, it is resistant to gel formation and works well with cutting fluids.

### Performance

CINCINNATI MACHINE P-47, P-50, P-53, SKC, FACHHOCHSCHULE DARMSTADT, DIN 51524 PART II, ZFG-12PASS, AFNOR NFE 48-603, DENISON TP-02100, BRUGGER, USSTEEL 224, AGMA 250.4, FRENCH STEEL FT 161, DIN 51517 PART III, DAVID BROWN S1.53.101, TS 11299



# AYGNC TRANSFORMER OIL





Physical property	Method	Rate
Density, g/cm³, 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,88
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	9,3
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	2,2
Pour Point, °C, max.	ASTM D 97/TS ISO 3016	-42
Flash Point,*C, min	ASTM D 92 /TS EN ISO 2592	150
Neutralization Number, mg KOH/g	ASTM D974	0,05

### SUPERIOR PERFORMANCE TRANSFORMER OIL

#### **Definition**

It is a high performance transformer oil formulated with highly refined naphthenic mineral oil and high quality additives.

### Usage areas

It is used as insulating oil in transformers, circuit breakers and oil switches.

### **Its Benefits and Advantages:**

- It shows high resistance to oxidation.
- It has high cooling feature.
- It is compatible with all materials used in electrical systems.
- It has high dielectric strength and heat transfer properties.
- It has a low freezing point.
- It is a high quality heat resistant oil.

### **Performance**

ASTM D 3487 Type II ve TEK



# AYGNC CLOSED SYSTEM OIL





Technical specifications								
Physical property	Method	68	100	150	220	320	460	680
Density,g/cm <sup>2</sup> , 15°C'de	ASTM D 4052	0,885	0,890	0,894	0,900	0,904	0,908	0,910
Kin. Viscosity, cSt, 40°C	ASTM D 445	68	100	150	220	320	460	680
Kin.Viscosity, cSt, 100°C	ASTM D 445	8,6	11,1	14,8	18,8	24,4	30,1	36,1
Viscosity Index	ASTM D 2270	100	97	95	96	96	94	90
Pour Point,*C, max.	ASTM D 97	-30	-24	-24	-18	-12	-9	-9
Flash Point, *C,min	ASTM D 92	230	230	235	240	245	250	270

### SUPERIOR PERFORMANCE CLOSED SYSTEM OILS

### **Definition**

They are gear oils blended with paraffinic base oils and high quality additives, have good load carrying capacity and show high performance under heavy operating conditions.

#### Usage areas

Produced in a wide viscosity range, this series can be used safely in any closed system.

#### **Its Benefits and Advantages:**

- Thanks to the EP additive it contains, it can be used safely under any load.
- It prevents abrasion by minimizing gear wear with its high load carrying capacity.
- It has excellent corrosion protection effect and viscosity-temperature relationship.
- In addition, it provides good operation even at high temperatures by reducing oxidation with the anti-oxidation additive it contains.
- It also has good water separation properties.
- It protects your system with its additives preventing rust, corrosion and foam formation, extends oil change periods and thus reduces maintenance costs.
- It is especially developed for industrial gearboxes where extreme pressure characteristics are required. It can also be used in chains, industrial vehicles, clutches and gearboxes.

### **Performance**

USS 224, AGMA 9005 - D94, General EP / antiwear component, DIN 51517 Part 3, David Brown S1-53-101 (E)



### **AYGNC SAW OIL**





Physical property	Method	
Density 15°C, g/cm <sup>3</sup>	ASTM D 1298/TS 1013 EN ISO 3675	0,889
Kin. Viscosity 40°C, cSt	ASTM D 445/TS 1451 EN ISO 3104	90,1
Kin. Viscosity 100°C, cSt	ASTM D 445/TS 1451 EN ISO 3104	10,4
Viscosity index	ASTM D 2270/TS 3096 ISO 2909	90
Pour Point °C	ASTM D 97/TS ISO 3016	-9
Flash Point,°C, min.	ASTM D 92 /TS EN ISO 2592	230

### SUPERIOR PERFORMANCE SAW OILS

### **Definition**

It is formulated from high quality base oils for sawing machines.

### Usage areas

It is used in sawing machines used in wood cutting and processing operations, for the lubrication of the moving parts of agricultural machines that do not require oil.

### **Its Benefits and Advantages:**

- They have high oxidation and thermal stability.
- It is resistant to rust and corrosion.
- Provides economical and convenient use.



### AYGNC CUTTING OILS





Physical property	Method	Rate
Density, g/cm <sup>3</sup> , 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,871
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	32
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	5,1
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	100
Pour Point,°C, max.	ASTM D 97/TS ISO 3016	-15
Flash Point, °C, min	ASTM D 92 /TS EN ISO 2592	190

### SUPERIOR PERFORMANCE CUTTING OILS

### **Definition**

It is formulated from high quality base oils for sawing machines.

### **Usage areas**

It is used in sawing machines used in wood cutting and processing operations, for the lubrication of the moving parts of agricultural machines that do not require oil.

### Its Benefits and Advantages:

- They have high oxidation and thermal stability.
- It is resistant to rust and corrosion.
- Provides economical and convenient use.



### AYGNC MOLD OILS





Physical property	Method	Rate
Density, g/cm³, 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,865
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	15
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	3,3
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	100
Pour Point °C, max.	ASTM D 97/TS ISO 3016	-15
Flash Point, °C, min	ASTM D 92 /TS EN ISO 2592	200

### SUPERIOR PERFORMANCE WOODEN MOLDING OIL

### **Definition**

It is a ready-to-use wood mold oil containing high quality mineral base oil, emulsifier and water.

### Usage areas

It is used to facilitate the separation of wooden molds from concrete and to obtain a smooth surface.

### **Its Benefits and Advantages:**

- Provides quick and easy removal of the mold.
- Contains low viscosity oil fractions.
- It facilitates the cleaning of the mold.
- The product does not accumulate, does not emulsify and has a porous structure does not.
- It provides concrete with a smooth surface by facilitating the placement of concrete in the mold and the removal of air bubbles.
- It increases the productivity and life of the mold used.

### **Application**

Apply the emulsion to the molds by brush, roller or spraying method at least 3 hours before the concrete is poured.



### **AYGNC TURBINE OILS**





Riziksel Özellik	Metnt	Türkin 1:2:32	Tirkir Nag 15	Tirbin Yağı 68	Türkin Yağı 100	TilrNn 76(4) 150		Tirbh Yag 320
Yoganist, gitari, 15°C	ASTRO LIBERT BURNER DATE.	0.57	0.87	0.38	0,55	0,05	0,29	0.5
۸۱۰ یک رطانده خواند ۱۵۰۰	AST MID IME, TS SMED EN ISO E 001	E2,65	45,71	57,72	102.7	161	234,9	336
lin Kirkende, de 1800	25 N H 42 / 15 12 N H N PO 1012	1,21	1dh	1,71	11,71	Tcl	.3/10.	14
Visitatine Incellal	מורק הצוום יותר ציל/מקליק מו אודייג	100	105	130	25	21.	าา	14
Ale der me Nothern, N. mm.	ASIM DISE/IS BY ISO 2562	461	25.	Zi b	130	JeU	260	Del.
Aloma Mokrasi, Y, may	ASTIN DISTRICT ISSUED	-10	-74	-10	-17	-12	-1	-0
fakt Sedellineryes 19862 1. Land	AST M D 150, TS 2740 EN ISD 2 160	î.	14	1.	Su .	1.	54	-

### SUPERIOR PERFORMANCE TURBINE OILS

#### Definition

They are high-performance turbine oils formulated from high-quality base oils and high-quality package additives.

### **Usage Areas**

- Gas turbines
- Steam turbines
- · Gear turbines
- Hydraulic turbines
- Lubrication of air compressors, vacuum pumps, gear systems, roller and slide bearings

### **Benefits and Advantages**

- · Resists rust and corrosion formation, extending the system's lifespan
- Protects turbine bearings and gears against abrasion with a protective film layer
- Easy separation from air and water
- Suitable for both low and high temperature operation
- Prevents sludge and deposit formation, ensuring protection at high temperatures
- · Prevents viscosity increase and residue by resisting oxidation
- Wide range of applications: iron and steel, thermal power plants, coal plants, refineries, fertilizer, and sugar factories

### **Performance Standards**

- DIN 51515 (R+Q)
- BS 489
- MIL-L-17672D
- CEGD 207001, HT GD 90 117E, NEA P50001
- GEK-46506 B, GEK-28143 A, GFK-141003H
- U.S. Steel 120 and 125



### AYGNC ROCK DRILL OIL





Technical specification	ıs		
ISO CLASS	STANDARD	46	100
KINEMATIC VISCOSITY 40 °C, CST	ASTM D 445	43,92	97,8
VISCOSITY INDEX	ASTM D 2270	102	106
FLASH POINT, °C	ASTM D 92	224	248

### SUPERIOR PERFORMANCE DRILL OILS

### **Definition**

It is an oil formulated with EP (Extra Pressure) additive to high quality base oils, anti-oxidation and additives that provide resistance against water washing.

### **Usage Areas**

- Suitable for pneumatic tools with impact loads
- Drills and rock drills
- Impact type pneumatic tools such as pavement breakers and air guns

### **Its Benefits and Advantages**

- Provides excellent lubrication and wear protection performance thanks to its EP additive in equipment operating under impact load even under the most difficult conditions.
- Thanks to its high oxidation resistance, it prevents the formation of residue and viscosity thickening caused by oxidation.
- Prevents foaming by releasing the air out in a short time.
- Maintains its fluidity at low temperatures and provides effective lubrication at high temperatures.
- It is protective against corrosion thanks to the corrosion inhibitor in the additive system, even in working conditions where water is present.





# AUTOMOTIVE AND INDUSTRIAL GREASE OILS



### AYGNC LITHIUM GRASE **EP SERIES**





Technical sp	ecificat	ions			
Typical Properties					
NLGI		0	1	2	3
Color		Light Brown	Light Brown	Light Brown	Light Brown
Soap Type		Lithium	Lithium	Lithium	Lithium
DIN Classification	DIN 51502	KP o K-30	KP 1 K-30	KP 2 K-30	KP 3 K-20
ISO Classification XBCEB-3	ISO 6743-9	L-XCCEB-0	L-XCCEB-1	L-XCCEB-2	L-XBCEB-3
Processed Penetration 0.1 mm (60 strokes at 25 ° C)	ASTM D 217	355-385	310-340	265-295	220-250
Base Oil Viscosity @40°C, mm∜s @100°C, mm∜s	ASTM D 445	220,0 19,0	220,0 19,0	220,0 19,0	220,0 19,0
Dropping Point, °C	ASTM D 566	>185	>190	>190	>190
Working Temperature, <sup>®</sup> C		-30 to 120	-30 to 120	-30 to 120	-20 to 120
Oil Separation, % (158h, 40°C)	IP 121	<5	<4	<4	<3
4-Ball Boiling Load, N	ASTM D 2596	>2500	>2600	>2600	>2600

### OVER PRESSURE RESISTANT MULTI-PURPOSE LITHIUM GRASE

### Definition

It is a high performance multi-purpose grease developed by using high quality base oils and extreme pressure (EP) additives with a lithium soap thickener.

### **Usage Areas**

It is used in wheel bearings and central lubrication systems of automobiles, commercial and land vehicles, agricultural and construction machines, in industrial applications where the operating temperature with heavy and impact loads does not exceed 130 °C.

It can be used safely in high speed light or normally loaded bearings and bearings such as electric motors, generators, fans, and water pumps.

### **Its Benefits and Advantages**

- Provides superior protection at medium loads where very heavy working conditions are not required.
- Extends the life of the system by providing effective protection against abrasion, rust, and corrosion.
- Can be pumped easily.
- Prevents abrasion in shock and vibration loads, provides superior protection.
- Extends greasing intervals, reduces maintenance costs, and saves money.
- Very good mechanical and shear stability, with high load carrying capacity.
- · Resistant to water.







# AYGNC LITHIUM COMPLEX GRASE SERIES





NLGI No	2	3
Color	Blue	Blue
Soap Type	Li	Li Complex
Processed Penetration, (25°C/60 Storke)	265/295	220/250
Dropping Point,*C, min	210	250
Working Temperature, C, max.	250	250
Timken OK Load Test, 1b	315	min 315

### RESISTANT TO OVER PRESSURE LITHIUM COMPLEX GREASE

### **Definition**

It is a high performance lithium complex soap grease with a wide application area. Produced with high quality paraffinic mineral oils, contains antioxidants, corrosion inhibitors and EP (extreme pressure) / AW (antiwear) additives.

### Usage areas

It has been developed to be used at all lubrication points where high temperature and pressure and high resistance to water are required.

It can be used in bearings and bearings, universal connections and chassis in automotive and industrial applications.

It is suitable for use in construction machinery, tractors and all agricultural machinery, stationary and mobile cranes, trucks, tractor units, rock crushers.

It is also recommended for marine, paper and sugar machinery, wet end bearings and mining industry applications.

### **Its Benefits and Advantages**

- Provides economy by reducing grease type in large-purpose applications of vehicle logs and factories.
- Provides high resistance against rust and corrosion.
- Excellent resistance at high temperatures, high dropping point.
- Minimizes maintenance costs by reducing wear thanks to the EP high pressure additive it contains. It has a heavy load carrying capacity.









# AYGNC LITHIUM COMPLEX MOLYBDENG GREASE





Technical specificati	ions	
SOAP TYPE	-	LITHIUM COMPLEX
THICKENER TYPE	-	MoS2
COLOR	-	Black
NLGI	-	2
DROPPING POINT, °C, MIN	ASTM D 566	250 °C
PROCESSED PENETRATION, 25 °C	ASTM D 217	265-295
WORKING TEMPERATURE, °C, MI	J -	-30 °C, +150 °C
4 BALL TEST(DIN 51350:4), KGF	ASTM D 2596	315

### RESISTANT TO OVER PRESSURE LITHIUM MOLYBDENE GREASE

#### Definition

It is a lithium complex grease with a wide application area, high performance, containing  $MoS_2$ . Produced with high quality paraffinic mineral oils, it contains antioxidants, corrosion inhibitors, and EP (extreme pressure) / AW (antiwear) additives.

#### **Usage Areas**

It has been developed to be used at all lubrication points where high temperature and pressure and high resistance to water are required.

It can be used in bearings, universal connections, and chassis in automotive and industrial applications.

It is suitable for use in construction machinery, tractors and all agricultural machinery, stationary and mobile cranes, trucks, tractors, rock crushers, as well as marine, paper and sugar machinery, wet end roller bearings, and mining industry applications.

### **Its Benefits and Advantages**

- Provides economy by reducing grease type in wide-purpose applications of vehicle fleets and factories. Provides multi-purpose use.
- Provides high resistance against rust and corrosion.
- Excellent resistance at high temperatures, high dropping point.
- Provides resistance against vibration thanks to the MoS<sub>2</sub> content.
- $\bullet \ \ Since it \ contains \ MoS_2, it \ provides \ extra \ protection \ in \ bearings \ operating \ under \ vibrating \ and \ impact \ heavy \ loads.$
- Thanks to the EP high pressure additive it contains, it minimizes maintenance costs by reducing wear.
- It has a heavy load carrying capacity.
- Provides low grease consumption thanks to its high adhesive and fibrous structure.









# AYGNC GRAPHITE GREASE (CALCIUM)





Technical specifications		
SOAP TYPE	STANDARD	Ca Grafit
COLOR	72	BLACK
NLGI	ASTM D 217	2
DROPPING POINT ,°C , MIN	ASTM D 566	90
PROCESSED PENETRATION, 25 °C	ASTM D 217	265-295
WORKING TEMPERATURE, °C,	-	-12/+70

### **GRAPHITE GREASE**

### **Definition**

It is a black-colored grease with calcium soap containing graphite, prepared with mineral oils.

### **Usage areas**

It provides safe lubrication without losing its properties for a long time in open gears, ship ropes lubrication, conveyor belt systems with high vibration, heavy-duty construction equipment, and industrial areas.

### **Its Benefits and Advantages:**

- Provides high resistance against water and corrosion.
- Provides resistance to vibration thanks to the graphite powder it contains.
- It minimizes maintenance costs by reducing wear in areas of use with wheel and rail systems such as in the railway and ship industry.
- Creates a buffer oil film in vibrating environments, prolonging equipment life.



# AYGNC GRAPHITE GREASE (LITHIUM)





Technical specifications		
SOAP TYPE	STANDARD	Li Grafit
COLOR	-	BLACK
NLGI	-	2
DROPPING POINT ,°C , MIN	ASTM D 566	190
PROCESSED PENETRATION, 25 °C	ASTM D 217	265 - 295
WORKING TEMPERATURE, °C,	5	-20/+130

### LITHIUM GRAPHITE GREASE

### **Definition**

It is a lithium soap, black-colored grease containing graphite, prepared with mineral oils.

### **Usage areas**

It provides safe lubrication without losing its properties for a long time in open gears, ship ropes lubrication, conveyor belt systems with high vibration, heavy-duty construction equipment, and industrial areas.

### **Its Benefits and Advantages**

- Provides high resistance against water and corrosion.
- $\bullet$  Provides operating performance between -20 °C and +130 °C.
- Provides resistance to vibration thanks to the graphite powder it contains.
- Minimizes maintenance costs by reducing wear in areas of use with wheel and rail systems such as in the railway and ship industry.
- Extends the life of the bearing by forming a buffer oil film in vibrating environments.



# AYGNC WHITE GREASE SERIES





Technical specification	ns		
NLGI No	1	2	3
Color	Light Yellow	Light Yellow	Light Yellow
Soap Type	Ca	Ca	Ca
Processed Penetration (25°C/60Storke)	310/340	265/295	220/250
Dropping Point,°C, min	97	97	100

### MULTIPURPOSE CALCIUM GREASE

### **Definition**

It is a general purpose grease formulated using high quality base oils and calcium soap thickener.

### Usage areas

It is suitable for use in ball and roller bearings, chassis lubrication and hydraulic turbines where the temperature is not too high (<80 °C) and water is unavoidable.

### **Its Benefits and Advantages:**

- It is water resistant and protects the system against wear and corrosion.
- With its high adhesion to metal surfaces, it prevents the entry of foreign substances in the systems where it is used and provides economical use.
- It shows superior performance by providing quick and effective lubrication in applications where the temperature is not high.





### AYGNC RUBBER GREASE SERIES





Technical specificati	ons		
NLGI No	1	2	3
Color	Green	Green	Green
Soap Type	Ca	Ca	Ca
Processed Penetration (25°C/60Storke)	310/340	265/295	220/250
Dropping Point, °C, min	97	97	100

### MULTIPURPOSE CALCIUM GREASE

### **Definition**

It is a fibrous, water-resistant and multi-purpose calcium-containing grease produced with mineral-based high quality base oils and quality performance enhancing additives.

### Usage areas

It is used in working environments where loads are not heavy, temperature is not high (<80 °C) and water is unavoidable.

It is used in low speed plain and rotary bearings.

It is used in the lubrication of chassis, wheel bearings, axle joints.

### **Its Benefits and Advantages:**

- It shows excellent resistance to washing with water by adhering well to metal in humid or watery environments.
- It shows medium resistance to mechanical effects.
- Provides effective protection against wear and corrosion.
- It can be pumped easily.
- It is easy to use and economical.



### AYGNC RED GREASE SERIES





Technical specificati	ions		
NLGI No	1	2	3
Color	Red	Red	Red
Soap Type	Ca	Ca	Ca
Processed Penetration (25°C/60Storke)	310/340	265/295	220/250
Dropping Point, °C, min	97	97	100

### MULTIPURPOSE CALCIUM GREASE

### **Definition**

It is a fibrous, water-resistant and multi-purpose calcium-containing grease, produced with mineral-based high quality base oils and quality performance enhancing additives.

### Usage areas

It is used in working environments where loads are not heavy, temperature is not high (<80 °C) and water is unavoidable.

It is used in low speed plain and rotary bearings.

It is used in the lubrication of chassis, wheel bearings, axle joints.

### **Its Benefits and Advantages:**

- It shows excellent resistance to washing with water by adhering well to metal in moist or wet environments.
- It shows medium resistance to mechanical effects.
- Provides effective protection against wear and corrosion.
- It can be pumped easily.
- It is easy to use and economical.





# TRACTOR AND AGRICULTURAL MACHINE OILS











### **AYGNC FARMER 422**





Technical spec	cifications	
Physical property	Method	422
Density, g/cm3, 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,865
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	61,2
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	10,1
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	153
Pour Point, *C, max.	ASTM D 97/TS ISO 3016	-30
Flash Point, *C, min	ASTM D 92 /TS EN ISO 2592	210

### HIGH PROTECTION FOR TRANSMISSIONS OF TRACTORS AND AGRICULTURAL MACHINES

### **Definition**

It is a high-performance tractor oil suitable for use in all seasons and all working conditions, produced with high-quality paraffinic base oils and high-performance additives.

### Usage areas

It is used as a single-type oil in high-speed and turbocharged old and new diesel engines, gearboxes and transmissions, hydraulic and brake systems of all agricultural vehicles and tractors.

### **Its Benefits and Advantages:**

- With its effective formulation, it creates a strong protective film layer on the engine.
- With the help of the anti-oxidation additive it contains, it decreases maintenance costs by extending oil change periods.
- Provides effective protection in high-speed low torque and low-speed high torque applications.
- Stable against thermal changes with its high viscosity index.
- Provides excellent engine protection at high and low temperatures.
- Helps to keep the engine clean by preventing the formation of residue and sludge with its excellent cleaning feature.
- Provides high efficiency and silent operation in brake systems thanks to its additive reducing friction.

### **Performance**

API CF-4/CE / SF, MB 227.1/228.1, API GL-4, ALLISON C4, ACEA E3, ZF TE ML 06 parts A,B&C, MF M1135, M1139, M1143, M1144, M1145, FORD M2C159B, M2C134D, JOHN DEERE J20C,J27





### **AYGNC FARMER 426**





#### Technical specifications Typical Properties Density @15°C, g/ml **ASTM D 4052** 0,877 Viscosity @40°C, mm<sup>2</sup>/s ASTM D 445 56,1 Viscosity @100°C, mm²/s ASTM D 445 9,4 Viscosity Index **ASTM D 2270** 152 Flash Point, °C 224 ASTM D 92 Pour Point, °C ASTM D 97 -36

### HIGH PROTECTION FOR TRANSMISSIONS OF TRACTORS AND AGRICULTURAL MACHINES

#### **Definition**

It is an extra high performance multipurpose tractor oil designed to meet or exceed the demands of drivetrain and hydraulic oil. It is designed to meet the performance demands of agricultural and commercial tractors in a wide range of environments and operating conditions.

### Usage areas

It is used in heavy duty transmission organs, differentials, final drive gears, hydraulic systems, hydraulic steering systems, wet brakes, PTOs and hydrostatic drive systems.

It can be used in all gear applications except hypoid gear designs where API GL-4 or SAE 80W class oils are required.

Petformer Farmer 426 is not suitable for use as crankcase engine oil, but is recommended instead of engine oils in hydraulic systems and powertrains (up to 10W-30 viscosity).

### **Its Benefits and Advantages**

- Creates a strong protective film layer on the engine with its effective formulation.
- It protects the engine by preventing wear and helps to extend its life.
- With the help of anti-oxidation additive it contains, it decreases maintenance costs by extending the oil change periods.
- Provides effective protection in high-speed low torque and low speed-high torque applications.
- Stable against thermal changes with its high viscosity index. Provides excellent engine protection at high and low temperatures.
- · Helps to keep the engine clean by preventing the formation of residue and sludge with its excellent cleaning feature.
- Provides high efficiency and silent operation in brake systems thanks to its additive reducing friction.

### Performance

- ALLISON C-4
- API GL-4
- CNH MAT 3525/3509/3505
- FORD ESN-M2C86-B/C/ESN-M2C134-D
- JOHN DEERE JDM J20C/D
- KUBOTA UDT FLUID
- · MASSEY FERGUSON CMS M





### AYGNC FARMER 20W40





Typical Properties		
Density @15°C, g/ml	ASTM D 4052	0,883
Viscosity @40°C, mm²/s	ASTM D 445	86,0
Viscosity @100°C, mm²/s	ASTM D 445	14,4
Viscosity Index	ASTM D 2270	115
Flash Point, °C	ASTM D 92	216
Pour Point, °C	ASTM D 97	-36

### TRACTOR AND AGRICULTURAL MACHINES HIGH PROTECTION FOR TRANSMISSIONS

#### **Definition**

It is an extra high performance multipurpose tractor oil designed to meet or exceed the demands of drivetrain and hydraulic oil. It is designed to meet the performance demands of agricultural and commercial tractors in a wide range of environments and operating conditions.

### Usage areas

It is used in heavy duty transmission organs, differentials, final drive gears, hydraulic systems, power steering systems, wet brakes, PTOs and hydrostatic drive systems. It can be used in all kinds of gear applications except hypoid gear designs where API GL-4 oils are required.

#### Its Benefits and Advantages:

- Thanks to the corrosion inhibitor in its content, it protects the engine against rust and corrosion. Thanks to the foam cutting additive, thus the engine is protected against wear.
- While controlling the formation of deposits at high temperatures, it prevents the oil thickening with its dispersant property.
- Provides long oil change intervals and extends the life of the oil.
- · Provides easy oil flow in cold climate conditions.
- Thanks to the detergent and dispersants it contains, engine parts are kept clean.
- It protects the engine against abrasion at high temperatures, prevents foam formation, and ensures that the engine remains within the initial production tolerances.

### Performance

- ALLISON C-4
- API GL-4
- CASE MS 1207
- CNH MAT3525/3509/3506/3505
- FENDT FNHA-2-C-201.00/200.00
- FORD ESN-M2C86-B/C
- JOHN DEERE JDM J20C/200
- MASSEY FERGUSON CMS M 1145/1143/1141/1135
- RENAULT/CLAAS
- SAME DEUTZ FAHR





### **AYGNC FARMER 15W40**





Physical property	Method	15W-40
Density, g/cm <sup>3</sup> , 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,885
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	118,3
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	15,2
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	130
Pour Point, *C, max.	ASTM D 97/TS ISO 3016	-24
Flash Point, °C, min	ASTM D 92 /TS EN ISO 2592	230
Total Base Number, mg KOH/g	ASTM D 2896	7

### TRACTOR AND AGRICULTURAL MACHINES HIGH PROTECTION FOR TRANSMISSIONS

#### **Definition**

It is a high-performance multi-grade motor oil that can be used in all seasons, obtained by blending mineral-based base oils and high-quality additives.

### **Usage areas**

It is used in agricultural and agricultural vehicles working under heavy conditions and in all kinds of climatic conditions.

### **Its Benefits and Advantages**

- With the perfect film layer it provides, it offers superior protection even at high temperatures, prevents abrasions, thus extends the life of the engine and reduces maintenance costs.
- Its oxidation resistance is high. It prevents rust and corrosion formation and provides excellent protection against engine wear.
- Prevents acid formation with high TBN value, providing excellent protection.
- Provides economy by extending the engine oil usage period.
- Thanks to the detergent-dispersant properties of the additives in its content, it prevents the formation of residue and deposit and keeps the engine clean.
- Provides excellent protection in all seasons thanks to its high viscosity index.
- Provides more effective lubrication with antifoam additive it contains.
- Helps prevent air pollution by reducing exhaust gases.
- Reduces maintenance costs in old-type engines and minimizes oil consumption.

### **Performance**

API CF-4; MIL-L-2104 D; MB 228.1; MAN





### **AYGNC FARMER 20W50**





Physical property	Method	20W-50
Density, g/cm <sup>3</sup> , 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,890
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	172
Kin. Viscosity, cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	19,5
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	130
Pour Point, °C, max.	ASTM D 97/TS ISO 3016	-21
Flash Point, °C, min	ASTM D 92 /TS EN ISO 2592	230
Total Base Number, mg KOH/g	ASTM D 2896	7

### TRACTOR AND AGRICULTURAL MACHINES HIGH PROTECTION FOR TRANSMISSIONS

#### **Definition**

Modernly refined, high quality paraffinic base oils are formulated and blended with carefully selected package additives. It is a multi-grade engine oil that can be used in all operating conditions of the engine for 4 seasons, working with high performance in gasoline or diesel engines.

### Usage areas

It is used in agricultural vehicles and agricultural machinery working under heavy conditions.

Its Benefits and Advantages:

- With the help of package additives and detergent dispersant additives it is formulated, it prevents the formation of residue in hot and cold weather conditions and ensures that the engine runs clean.
- Without foaming in all weather conditions, it minimizes oil consumption without falling constant oil pressure.
- It facilitates the first starting in cold weather. It provides good lubrication in hot weather.
- It provides protection by minimizing the engine maintenance costs of heavy vehicles with high mileage.
- Decreases service expense by reducing product variety in gasoline or diesel engines.
- It prevents corrosion by neutralizing the acids formed as a result of combustion.
- It minimizes engine wear.
- It extends the life of the engine by forming a thick oil film at high temperatures thanks to its high viscosity index and anti-wear additives.
- It prevents air pollution in the environment by reducing exhaust gases.
- Reduces maintenance costs in old type engines and minimizes oil consumption.

### **Performance**

- API CF-4 / SF
- MIL-L-2104 D
- MB 228.1
- Meets MAN 2275 performance specifications.





### **AYGNC FARMER 422**





Technical specifications			
Physical Property	Method	422	
Density, g/cm³, 15°C	ASTM D 1298/TS 1013 EN ISO 3675	0,865	
Kin. Viscosity, cSt, 40°C	ASTM D 445/TS 1451 EN ISO 3104	61,2	
Kin. Viscosity , cSt, 100°C	ASTM D 445/TS 1451 EN ISO 3104	10,1	
Viscosity Index	ASTM D 2270/TS 3096 ISO 2909	153	
Pour Point ,*C, max.	ASTM D 97/TS ISO 3016	-30	
Flash Point, *C, min	ASTM D 92 /TS EN ISO 2592	210	

### COTTON COLLECTING MACHINE GREASE

### **Definition**

It is a semi-fluid lithium soap-based grease developed for use in cotton picking machines, formulated with extreme pressure (EP), anti-wear (AW), anti-oxidation and anti-corrosion additives.

### Usage areas

It is suitable for cotton picking and other agricultural machinery.

### **Its Benefits and Advantages:**

- Provides excellent protection against rusting.
- It has superior oxidation stability.
- · High surface adhesion and resistance to water.
- Thanks to its mechanical stability, it can be easily pumped in the central lubrication system, thus extending the life of the lubricated parts and reducing maintenance costs.

### **Performance**

API CF-4/CE/SF, MB 227.1/228.1, API GL-4, ALLISON C4, ACEA E3, ZF TE ML 06 parts A, B & C, MF M1135, M1139, M1143, M1144, M1145, FORD M2C159B, M2C134D, JOHN DEERE J20C, J27





## AYGNC COTTON COLLECTING MACHINE GREASE





COLOR	-	Green
NLGI	-	00
WORKED PENETRATION 25 ° C, 60 strokes	ASTM D 217	400-430
DROPPING POINT,°C, min	ASTM D 566	165
BASE OIL VISCOSITY, 40 °C, cst	ASTM D 445	20
OPERATING TEMPERATURE RANGE, ℃		-20°C to 120°C

### COTTON COLLECTING MACHINE GREASE

### **Definition**

It is a semi-fluid lithium soap-based grease developed for use in cotton picking machines, formulated with extreme pressure (EP), anti-wear (AW), anti-oxidation and anti-corrosion additives.

### **Usage areas**

It is suitable for cotton picking and other agricultural machinery.

### Its Benefits and Advantages:

- Provides excellent protection against rusting.
- It has superior oxidation stability.
- High surface adhesion and resistance to water.
- Thanks to its mechanical stability, it can be easily pumped in the central lubrication system, thus extending the life of the lubricated parts and reducing maintenance costs.



## AYGNC COTTON COLLECTING MACHINE DETERGENT





Technical specifications				
Viscosity, 40 °C, mm2/s	ASTM D 445	21,56		
Flash point, °C	ASTM D 92	206		
Pour point, °C	ASTM D 97	-15		

### COTTON COLLECTING MACHINE DETERGENT

### **Definition**

It is a concentrated liquid that is specially formulated with highly refined paraffinic base oils for the purpose of cleaning and moistening the spindle units in cotton picking machines, and which is formed emulsion by mixing with water.

### Usage areas

It is suitable for use in cotton pickers.

Its Benefits and Advantages:

- It keeps the surface moist continuously by cleaning the spindle unit from branches or leaves.
- It does not leave a stain on cotton.
- Protects the spindle unit against rusting.
- It prevents bacteria formation.

### **Usage**

First, put the amount of water you determined in the tank of your cotton picker. Add the product between 1.5% - 3.0% of the water you put in the reservoir. Emulsion will only occur if water is put into the chamber first and then the product. If this order is not followed, emulsion may not form and the performance of the product may be adversely affected.





### **CONTACT INFORMATION**

+90 531 685 91 45 Mr.Can

www.aygnc.com

Meşrutiyet Cad. 15/10 Çankaya/Ankara

For quotes, partnership inquiries, or any questions, please email info@aygnc.com.

