



**MASSÖL**

**PRODUCT CATALOGUE**

# **ABOUT US**

**NOOR ALKADDAH is an International leading company in Manufacturing all types of Lubricants, Greases, Brake fluids, Antifreeze liquids and Car care products. Trading all fuel types and grades for example, LPG, Naphtha, Gasoline, Diesel, Bitumen, Marine fuels, etc. Providing all Spare parts, Vehicle accessories. Import/Export and marketing of oil. It explains the nature of the company's operations, the expected volume of business, and the countries from which it imports and exports to, with an overview of the largest customers and suppliers, including only their names and the place where they conduct business.**

**Working closely with city stakeholders such as government, private sector and local communities, we aim to help cities move people and goods with lower emissions, switch to cleaner energy options and embed sustainable features in their built environments. Our target is to become a net-zero emissions energy business by 2050. ALKADDAH Group, founded in 1978 is a global group of energy and petrochemical companies that aims to meet the world's growing need for more and cleaner energy solutions in ways that are economically, environmentally and socially responsible.**

**We distribute around the globe with our Brand MASSÖL reaching consumers in all over the World, Our Company is committed to provide the best Support and Service Quality to its customers with the aim of Embarking on a Year-on-year Growth rate of 22% over the next 3 years. We are known for our High Quality assurance and level of Innovations.**



# **MASSÖL**



**MASSÖL**

## **TABLE OF CONTENTS**

<b>DIESEL ENGINE OIL .....</b>	<b>3</b>
<b>EXPLANATION OF LABELS .....</b>	<b>5</b>
<b>MOTOR ENGINE OIL .....</b>	<b>6</b>
<b>MOTOR ENGINE OIL .....</b>	<b>8</b>
<b>MOTOR ENGINE OIL .....</b>	<b>9</b>
<b>GEAR OILS .....</b>	<b>10</b>
<b>AUTOMATIC TRANSMISSION OILS (ATF) .....</b>	<b>13</b>
<b>HYDRAULIC OILS .....</b>	<b>15</b>
<b>ANTIFREEZE COOLANT .....</b>	<b>17</b>
<b>BRAKE FLUID .....</b>	<b>18</b>
<b>2 STROKE OIL .....</b>	<b>19</b>
<b>4 STROKE OIL .....</b>	<b>20</b>
<b>EXTREME-PRESSURE LITHIUM GREASE .....</b>	<b>22</b>
<b>MULTI-PURPOSE LITHIUM GREASE .....</b>	<b>23</b>

## TABLE OF CONTENTS CONTINUED...

EXTREME-PRESSURE CALCIUM GREASE ..... 24

MULTI-PURPOSE CALCIUM GREASE ..... 25

### *CONNECT WITH US!*



SCAN ME



SCAN ME



SCAN ME



SCAN ME



SCAN ME



SCAN ME



## DIESEL ENGINE OIL

Diesel oils are high performance crankcase oil for diesel engines. They are manufactured using selected premium paraffinic base oil and detergent, dispersant, wear control, antioxidant, corrosion inhibitor, and foam suppressant additives. Reduce the formation of piston deposits and varnish resulting from high temperature operation and sludge typical of low engine temperature service

### DIESEL ENGINE OIL SAE 50 (API CK4/CJ4/CI4/CH4/CD)



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	SAE 50
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	208
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	17
Density at 15°C	kg/L	ASTM D1298	0.901
Viscosity index	-	ASTM D2270	101
Pour point	°C	ASTM D97	-19
OC Flash point	°C	ASTM D97	245

### DIESEL ENGINE OIL SAE 60 (API CF/CD)



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	SAE 60
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	280
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	21
Density at 15°C	kg/L	ASTM D1298	0.906
Viscosity index	-	ASTM D2270	100
Pour point	°C	ASTM D97	-19
OC Flash point	°C	ASTM D97	245



## DIESEL ENGINE OIL SAE 70 (API CK-4/CJ4/CI4/CH4)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	SAE 70
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	380
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	28
Density at 15°C	kg/L	ASTM D1298	0.901
Viscosity index	-	ASTM D2270	105
Pour point	°C	ASTM D97	-18
OC Flash point	°C	ASTM D97	250

## DIESEL ENGINE OIL SAE 20W50 (API CH-4,CI-4/SL,SJ-ACEA:E7-12)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	20W50
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	155.7
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	16.5
Density at 15°C	kg/L	ASTM D1298	0.8833
Viscosity index	-	ASTM D2270	123
Pour point	°C	ASTM D97	-27
OC Flash point	°C	ASTM D97	240

## DIESEL ENGINE OIL SAE 15W40 (API CK-4/SN,CJ-4/CI-4 - ACEA:E6,E7,E9)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	15W40
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	99.8
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	12.5
Density at 15°C	kg/L	ASTM D1298	0.888
Viscosity index	-	ASTM D2270	134
Pour point	°C	ASTM D97	-25
OC Flash point	°C	ASTM D97	244





# MASSÖL

## EXPLANATION OF LABELLING

### API SL/CF

API stands for American Petroleum institute, the body in charge of oil performance and quality standards in the US. Like the ACEA standards it includes specifications for both spark ('S') petrol engines and compression ('C') diesel engines. SN is the latest specification for petrol engines, introduced in 2010. Diesel classifications are more complex. The CJ4- specification, introduced in 2006, is designed for modern emission control and particulate filter systems

#### PETROL A:

- A1 Fuel economy petrol
- A2 Standard performance level
- A3 High performance and/or extended drain
- A5 Fuel economy petrol with extended drain capability

#### DIESEL B:

- B1 Fuel economy petrol
- B2 Standard performance level
- B3 High performance and/or extended drain
- B4 Fuel economy petrol with extended drain capability
- B5 Fuel economy petrol with extended drain capability

#### PETROL & DIESEL C:

- Diesel vehicles with diesel particulate filter (DPF)
- C1 Low SAPS (%0.5 ash) fuel efficient
- C2 Mid SAPS (%0.8 ash) fuel efficient, performance
- C3 Mid SAPS (%0.8 ash)

#### DIESEL E:

- Heavy-duty diesel
- E1 Non-turbo charged light duty diesel
- E2 Standard performance level
- E3 High performance and extended drain
- E5 High performance and extended drain including some API specs
- E6 Euro 4 engines - low SAPS (sulphated ash, phosphorous, sulphur) for vehicles with DPF
- E7 Euro 4 engines - exhaust after treatment / exhaust gas recirculation

### Mineral

Mineral oil sounds like it should be synthetic too (minerals aren't organic, after all), but the name comes from the way it's extracted from the earth like other mineral deposits. It's 'cruder' than synthetic oil, but also a lot cheaper to manufacture, and it can still provide perfectly adequate protection for less demanding engines

### Synthetic

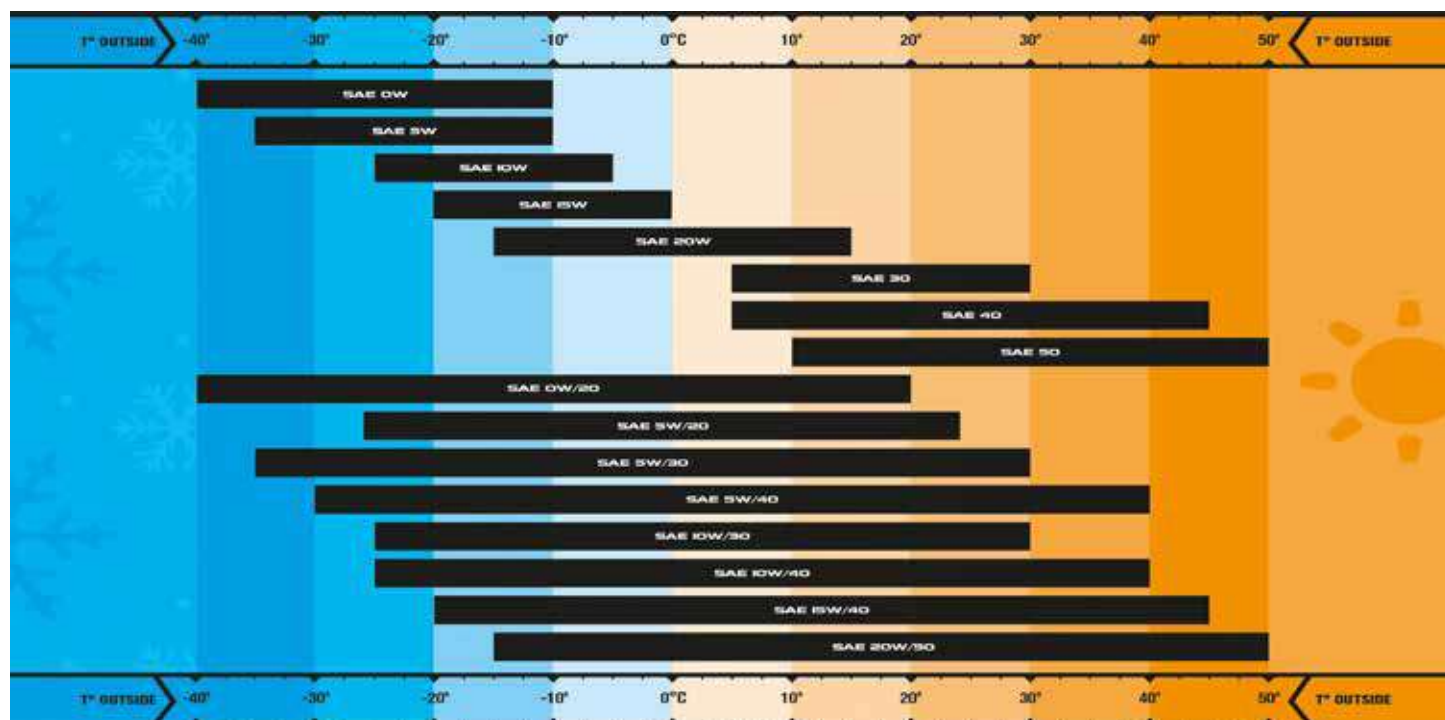
Synthetic motor oil is the pinnacle of engine lubrication for high performance vehicles. Despite the name, though, synthetic oil is still derived from the thick black stuff ejected by oil wells. The difference is that its molecular structure and properties are modified, refined and 'synthesised' using complex laboratory



## BRAND NAME

### 20W50

In order to protect the engine components when is car both hot and cold, engine oil has to meet viscosity specifications across a range of temperature. Viscosity is the oil's 'pourability' or 'thickness'. This viscosity is measured and given an SAE 'grade'. Ordinary single-grade oil becomes so viscous (thick) at lower temperatures that it would take too long to reach moving parts in a cold engine and would not process easily through small gaps and oil ways. This is why all modern engine oils use Vis - Viscosity Enhancers- to improve their viscosity at lower temperatures. These 'multigrade' oils get a regular viscosity test at 100 degrees Centigrade, and a second low-temperature 'winter' (W) test. Multigrade oils quote the 'W' (winter) figure first



## MOTOR ENGINE OIL

Motor engine oils are extra high performance, automotive lubricant formulated from select base oil and an advanced additive system specifically for limited-slip differentials. These lubricants are recommended for use in applications such as heavy duty differentials, axles, and final drives where extreme pressures and shock loading are expected.

### MOTOR OIL SAE 5W20

(API SP,SN/CF-ACEA A3/B4)



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	5W20
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	48
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	8.4
Density at 15°C	kg/L	ASTM D1298	0.855
Viscosity index	-	ASTM D2270	153
Pour point	°C	ASTM D97	-37
OC Flash point	°C	ASTM D97	225

### MOTOR OIL SAE 5W30

(API SP+/CF-ACEA A1/B1/A5/B5)



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	5W30
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	70.
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	11.9
Density at 15°C	kg/L	ASTM D1298	0.852
Viscosity index	-	ASTM D2270	171
Pour point	°C	ASTM D97	-35
OC Flash point	°C	ASTM D97	220





## MOTOR OIL SAE 5W40 (API SP/SN/ EC- ACEA A3/B4)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	5W40
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	87.9
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	13.7
Density at 15°C	kg/L	ASTM D1298	0.85
Viscosity index	-	ASTM D2270	168
Pour point	°C	ASTM D97	-39
OC Flash point	°C	ASTM D97	226

## MOTOR OIL SAE 0W20 (API SP,SN,SN+-ACEA A1,B1)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	0W20
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	38.4
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	7.3
Density at 15°C	kg/L	ASTM D1298	0.848
Viscosity index	-	ASTM D2270	157
Pour point	°C	ASTM D97	-40
OC Flash point	°C	ASTM D97	225

## MOTOR OIL SAE 0W30 (API SP,SN,SN+-ACEA C2/C3)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	0W30
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	66.7
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	11.6
Density at 15°C	kg/L	ASTM D1298	0.85
Viscosity index	-	ASTM D2270	179.8
Pour point	°C	ASTM D97	-41
OC Flash point	°C	ASTM D97	218



## MOTOR OIL SAE 0W40 (API SN,SN+-ACEA A3/B4)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	0W40
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	75
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	12.8
Density at 15°C	kg/L	ASTM D1298	0.85
Viscosity index	-	ASTM D2270	179
Pour point	°C	ASTM D97	-40
OC Flash point	°C	ASTM D97	>225

## MOTOR OIL SAE 10W30 (API SN,SN+,SM-ACEA A1/B1)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	10W30
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	67.5
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	10
Density at 15°C	kg/L	ASTM D1298	0.868
Viscosity index	-	ASTM D2270	139
Pour point	°C	ASTM D97	-37.5
OC Flash point	°C	ASTM D97	229

## MOTOR OIL SAE 10W40 (API SN/CF- ACEA A3/B4)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	10W40
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	95
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	13.2
Density at 15°C	kg/L	ASTM D1298	0.8736
Viscosity index	-	ASTM D2270	160
Pour point	°C	ASTM D97	-20
OC Flash point	°C	ASTM D97	224



## MOTOR OIL SAE 15W40 (API SL/CF-ACEA A1/B1)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	15W40
Kinematic viscosity at 40°C	mm²/s	ASTM D445	120
Kinematic viscosity at 100°C	mm²/s	ASTM D445	14.9
Density at 15°C	kg/L	ASTM D1298	0.888
Viscosity index	-	ASTM D2270	137
Pour point	°C	ASTM D97	-26
OC Flash point	°C	ASTM D97	228

## MOTOR OIL SAE 20W50 (API SL/CF-ACEA A1/B4)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	20W50
Kinematic viscosity at 40°C	mm²/s	ASTM D445	160
Kinematic viscosity at 100°C	mm²/s	ASTM D445	17.7
Density at 15°C	kg/L	ASTM D1298	0.883
Viscosity index	-	ASTM D2270	130
Pour point	°C	ASTM D97	-35
OC Flash point	°C	ASTM D97	229



## SPECIALIZED MOTOR OIL



## GEAR OIL

Gear oils are automotive rear-axle lubricants which incorporates a special friction-modifier. Additive system in high-quality solvent-refined base-oil, to obtain optimum slip function. High pressure agents and other additives offer good wear protection under harsh operating conditions.

### GEAR OIL SAE 75W80 (API GL-4, GL-5, GL-1)



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	75W80
Viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	55
Viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	9
Density at 15°C	kg/L	ASTM D1298	0.861
Viscosity index	-	ASTM D2270	155
Pour point	°C	ASTM D97	-38
OC Flash point	°C	ASTM D97	230

### GEAR OIL SAE 75W140 (API GL-5, GL-5 LS)



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	75W140
Viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	168
Viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	23.8
Density at 15°C	kg/L	ASTM D1298	0.872
Viscosity index	-	ASTM D2270	175
Pour point	°C	ASTM D97	-45
OC Flash point	°C	ASTM D97	205





## GEAR OIL SAE 80W90 (API GL-4, GL-5)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	80W90
Viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	140
Viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	14.5
Density at 15°C	kg/L	ASTM D1298	0.895
Viscosity index	-	ASTM D2270	105
Pour point	°C	ASTM D97	-30
OC Flash point	°C	ASTM D97	210

## GEAR OIL SAE 85W140 (API GL-4, GL-5)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Viscosity grade	-	SAE J300	85W 140
Viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	363
Viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	26.6
Density at 15°C	kg/L	ASTM D1298	0.895
Viscosity index	-	ASTM D2270	102
Pour point	°C	ASTM D97	-20
OC Flash point	°C	ASTM D97	200

## GEAR OIL EP 150 EP ISO 150



### TYPICAL PROPERTIES:

PHYSICAL CHARACTERISTICS	TEST METHOD	TYPICAL VALUE
ISO Grade	Visual	EP 150
Appearance		Bright & Clear
Density @ 15 °C, kg/L	ASTM D-1298	0.9
Kinematic Viscosity, cSt		
At 40°C	ASTM D-445	154
At 100°C	ASTM D-445	15
Viscosity Index	ASTM D-2270	95
Flash Point, COC, °C	ASTM D-92	250
Pour Point, °C	ASTM D-97	-20
TBN mg KOH/g.	ASTM D-974	0.24



## GEAR OIL EP 220

EP ISO 220



### TYPICAL PROPERTIES:

PHYSICAL CHARACTERISTICS	TEST METHOD	TYPICAL VALUE
ISO Grade	Visual	EP 220
Appearance		Bright & Clear
Density @ 15 °C, kg/L	ASTM D-1298	0.904
Kinematic Viscosity, cSt		
At 40°C	ASTM D-445	220
At 100°C	ASTM D-445	18.7
Viscosity Index	ASTM D-2270	95
Flash Point, COC, °C	ASTM D-92	250
Pour Point, °C	ASTM D-97	-20
TBN mg KOH/g.	ASTM D-974	0.24

## GEAR OIL EP 320

EP ISO 320



### TYPICAL PROPERTIES:

PHYSICAL CHARACTERISTICS	TEST METHOD	TYPICAL VALUE
ISO Grade	Visual	EP 320
Appearance		Bright & Clear
Density @ 15 °C, kg/L	ASTM D-1298	0.907
Kinematic Viscosity, cSt		
At 40°C	ASTM D-445	320
At 100°C	ASTM D-445	24
Viscosity Index	ASTM D-2270	95
Flash Point, COC, °C	ASTM D-92	265
Pour Point, °C	ASTM D-97	-13
TBN mg KOH/g.	ASTM D-974	0.24

## GEAR OIL EP 460

EP ISO 460



### TYPICAL PROPERTIES:

PHYSICAL CHARACTERISTICS	TEST METHOD	TYPICAL VALUE
ISO Grade	Visual	EP 460
Appearance		Bright & Clear
Density @ 15 °C, kg/L	ASTM D-1298	0.91
Kinematic Viscosity, cSt		
At 40°C	ASTM D-445	460
At 100°C	ASTM D-445	30.4
Viscosity Index	ASTM D-2270	95
Flash Point, COC, °C	ASTM D-92	275
Pour Point, °C	ASTM D-97	-8
TBN mg KOH/g.	ASTM D-974	0.24



## AUTOMATIC TRANSMISSION FLUID

Automatic Transmission Fluids are a high performance automatic transmissions, requiring DEXRON quality fluids respectively. They are specially selected performance additives and base oils.

This oil provides improved thermo-oxidative stability, friction retention properties, foam control and seal compatibility.

### AUTOMATIC TRANSMISSION FLUID

#### ATF DEXRON II



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Color	-	-	Red
Kinematic viscosity at 40°C	mm²/s	ASTM D445	35
Kinematic viscosity at 100°C	mm²/s	ASTM D445	6
Density at 15°C	kg/L	ASTM D1298	0.867
Viscosity index	-	ASTM D2270	153
Pour point	°C	ASTM D97	-37
OC Flash point	°C	ASTM D97	200

### AUTOMATIC TRANSMISSION FLUID

#### ATF DEXRON III



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Color	-	-	Red
Kinematic viscosity at 40°C	mm²/s	ASTM D445	32
Kinematic viscosity at 100°C	mm²/s	ASTM D445	6
Density at 15°C	kg/L	ASTM D1298	0.842
Viscosity index	-	ASTM D2270	173
Pour point	°C	ASTM D97	-40
OC Flash point	°C	ASTM D97	Min175





# MASSÖL

## AUTOMATIC TRANSMISSION FLUID

ATF DEXRON VI



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Color	-	-	Red
Kinematic viscosity at 40°C	mm²/s	ASTM D445	26
Kinematic viscosity at 100°C	mm²/s	ASTM D445	5.4
Density at 15°C	kg/L	ASTM D1298	0.86
Viscosity index	-	ASTM D2270	145
Pour point	°C	ASTM D97	-42
OC Flash point	°C	ASTM D97	215

## AUTOMATIC TRANSMISSION FLUID

ATF TYPE A



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Color	-	-	Red
Kinematic viscosity at 40°C	mm²/s	ASTM D445	34.8
Kinematic viscosity at 100°C	mm²/s	ASTM D445	7.3
Density at 15°C	kg/L	ASTM D1298	0.863
Viscosity index	-	ASTM D2270	160
Pour point	°C	ASTM D97	-39
OC Flash point	°C	ASTM D97	206





## HYDRAULIC OIL

Hydraulic Oils are designed to give maximum protection to hydraulic pumps in high performance industrial applications as well as in environmentally sensitive areas.

It is formulated with base stocks and ashless ("zinc-free") additive system that provides superior oxidation stability, water separately, foam suppression, and protection against wear, rust and corrosion.

### HYDRAULIC OIL ISO 32



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
ISO viscosity grade	-	-	32
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	31.6
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	5.1
Density at 15°C	kg/L	ASTM D1298	0.88
Viscosity index	-	ASTM D2270	>95
Pour point	°C	ASTM D97	-39
OC Flash point	°C	ASTM D97	210

### HYDRAULIC OIL ISO 37



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
ISO viscosity grade	-	-	37
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	35
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	5.9
Density at 15°C	kg/L	ASTM D1298	0.864
Viscosity index	-	ASTM D2270	112
Pour point	°C	ASTM D97	-35
OC Flash point	°C	ASTM D97	208



## HYDRAULIC OIL ISO 46



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
ISO viscosity grade	-	-	46
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	43
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	6.4
Density at 15°C	kg/L	ASTM D1298	0.88
Viscosity index	-	ASTM D2270	101.6
Pour point	°C	ASTM D97	-30
OC Flash point	°C	ASTM D97	226

## HYDRAULIC OIL ISO 68



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
ISO viscosity grade	-	-	68
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	65
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	8.3
Density at 15°C	kg/L	ASTM D1298	0.884
Viscosity index	-	ASTM D2270	99.2
Pour point	°C	ASTM D97	-33
OC Flash point	°C	ASTM D97	237




# SPECIALIZED HYDRAULIC OIL

## ANTIFREEZE COOLANT

Antifreeze engine coolant, is a colored liquid that is mixed with water to help regulate your engine during extreme temperatures. As the temperature outside changes from hot to cold coolant is pumped throughout the engine block to maintain an even operating temperature.

### ANTIFREEZE COOLANT

ANTIFREEZE 50%



#### TYPICAL PROPERTIES:

TEST	RESULT
Density @ 15°C kg/L	1.06
Boiling point °C	160
pH	7.8-8.2
Freezing point °C	-21

ORGANIC ACID TECHNOLOGY

### ANTIFREEZE COOLANT

ANTIFREEZE 100% CONCENTRATED



#### TYPICAL PROPERTIES:

TEST	RESULT
Density @ 15°C kg/L	1.11
Boiling point °C	170
pH	8.5
Freezing point °C	-34

ORGANIC ACID TECHNOLOGY



ANTIFREEZE



## BRAKE FLUID

Brake fluid is a type of hydraulic fluid used in hydraulic brake and clutch applications in automobiles, motorcycles, light trucks and some bicycles. It is used to transfer force into pressure. It's recommended for complete fluid replacement and "top-up" in most cars and light trucks

## BRAKE FLUID DOT 3



### TYPICAL PROPERTIES:

DESCRIPTION	TEST METHOD	DOT 3
Appearance	Visible	Transparent
Equilibrium reflux boiling point ( ERBP) °C,	FMVSS 116	205 Min
Wet equilibrium reflux boiling point (WERBP)	FMVSS 116	140 Min
Kinematic Viscosity@ 100°C cst	ASTM D-445	>1.5
pH	FMVSS 116	7.5-11.0
Specific Gravity 60 °F kg/L	ASTM D-1298	1.07-1.15
Flash Point °C	ASTM D-92	130 Min

## BRAKE FLUID DOT 4



### TYPICAL PROPERTIES:

DESCRIPTION	TEST METHOD	DOT 4
Appearance	Visible	Transparent
Equilibrium reflux boiling point ( ERBP) °C,	FMVSS 116	235 Max
Wet equilibrium reflux boiling point (WERBP)	FMVSS 116	150 Min
Kinematic Viscosity@ 100°C cst	ASTM D-445	>1.5
pH	FMVSS 116	7.5-11.0
Specific Gravity 60 °F kg/L	ASTM D-1298	1.07-1.15
Flash Point °C	ASTM D-92	120 Min





## 2 STROKE OIL

2-Stroke Oil for motorcycles is formulated with a modern low ash additive system which offers protection against scuffing of piston rings and liner wear by minimizing piston ring deposits. It serves all modern and older model 2 stroke engines, as well as three wheeler light passenger vehicles powered by two stroke engine and chainsaws and in portable equipment powered by two stroke engine.

### 2 STROKE

SAE 30 API TC JASO FC



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	89.9
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	13.8
Density at 15°C	kg/L	ASTM D1298	0.874
Viscosity index	-	ASTM D2270	155
Pour point	°C	ASTM D97	-35
OC Flash point	°C	ASTM D97	226

### 2 STROKE

API TC-W3 NMMA



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	53
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	8.3
Density at 15°C	kg/L	ASTM D1298	0.882
Viscosity index	-	ASTM D2270	160
Pour point	°C	ASTM D97	-35
OC Flash point	°C	ASTM D97	229



## 4 STROKE OIL

4T advanced four-stroke motorcycle engine oil helps provide an outstanding level of performance in today's high-performance motorcycles. It helps keep four-stroke engines running clean, providing protection even in extreme operating conditions.

### 4 STROKE

SAE 10W30 (API SL-SJ-SH-SG-JASO MB)



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	69
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	10.5
Density at 15°C	kg/L	ASTM D1298	0.882
Viscosity index	-	ASTM D2270	140
Pour point	°C	ASTM D97	-31
OC Flash point	°C	ASTM D97	228

### 4 STROKE

SAE 5W40 (API SN-JASO MA2)



#### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	ASTM D445	79.6
Kinematic viscosity at 100°C	mm <sup>2</sup> /s	ASTM D445	13.6
Density at 15°C	kg/L	ASTM D1298	0.856
Viscosity index	-	ASTM D2270	175
Pour point	°C	ASTM D97	-36
OC Flash point	°C	ASTM D97	231



## 4 STROKE

SAE 10W40 (API SN-JASO MA2)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Kinematic viscosity at 40°C	mm²/s	ASTM D445	90
Kinematic viscosity at 100°C	mm²/s	ASTM D445	13.8
Density at 15°C	kg/L	ASTM D1298	0.882
Viscosity index	-	ASTM D2270	155
Pour point	°C	ASTM D97	-31
OC Flash point	°C	ASTM D97	228

## 4 STROKE

SAE 20W50 (API SL-JASO MA2)



### TYPICAL PROPERTIES:

TEST	UNIT	TEST METHOD	RESULT
Kinematic viscosity at 40°C	mm²/s	ASTM D445	160
Kinematic viscosity at 100°C	mm²/s	ASTM D445	18.5
Density at 15°C	kg/L	ASTM D1298	0.881
Viscosity index	-	ASTM D2270	126
Pour point	°C	ASTM D97	-31
OC Flash point	°C	ASTM D97	230



**SPECIALIZED MOTOR OIL**



## EP - MP LITHIUM GREASE

A specially developed multi-purpose lithium complex grease for lubricating all anti-friction and plain bearings for use in industrial and automotive applications. The grease has shown exceptional performance providing extended lubrication intervals over a wide operating temperature range.

### FEATURES AND BENEFITS

Wide operating temperature range Extra protection against rust and corrosion,  
Good pump ability in centralized systems Good resistance to water washout,  
Excellent structural stability

## LITHIUM GREASE EP 2

Meets and exceeds for EP2 ISO 6743-9 L-XBEHB 2, DIN 51502 KP2P-20



### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	2
Color	Visual	Yellow-Brown-Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-25 to 140
Penetration @ 25°C, 0.1 mm	ASTM D217	265 -295
Dropping point, °C	IP 396/DIN ISO 2176	≥194
Kinematic viscosity of the base oil @40°C, mm <sup>2</sup> /s	ASTM D445	165

## LITHIUM GREASE EP 3

Meets and exceeds for EP3 ISO 6743-9 L-XBDHB 3, DIN 51502 P3N-20



### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	3
Color	Visual	Yellow-Brown-Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-25 to 140
Penetration @ 25°C, 0.1 mm	ASTM D217	220-250
Dropping point, °C	IP 396/DIN ISO 2176	≥194
Kinematic viscosity of the base oil @40°C, mm <sup>2</sup> /s	ASTM D445	165





## LITHIUM GREASE MP 2

Meets and exceeds for MP2 ISO 6743-9. L-XBCEA 2, DIN 51502 K2K-25



### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	2
Color	Visual	Yellow Brown Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-25 to 120
Penetration @ 25°C, 0.1 mm	ASTM D217	265-295
Dropping point, °C	IP 396/DIN ISO 2176	≥184
Kinematic viscosity of the base oil @40°C, mm <sup>2</sup> /s	ASTM D445	151

## LITHIUM GREASE MP 3

Meets and exceeds for MP3 ISO 6743-9: L-XBCEA 3, DIN 51502 KPIK-30



### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	3
Color	Visual	Yellow-Brown-Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-25 to 120
Penetration @ 25°C, 0.1 mm	ASTM D217	220-250
Dropping point, °C	IP 396/DIN ISO 2176	≥184
Kinematic viscosity of the base oil @40°C, mm <sup>2</sup> /s	ASTM D445	151

## LITHIUM GREASE MP 1

Meets and exceeds for MP1 ISO 6743-9 L-XBCEB 1, DIN 51502 KPIK-30



### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	1
Color	Visual	Yellow-Brown-Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-25 to 100
Penetration @ 25°C, 0.1 mm	ASTM D217	335-320
Dropping point, °C	IP 396/DIN ISO 2176	≥176
Kinematic viscosity of the base oil @40°C, mm <sup>2</sup> /s	ASTM D445	220



## EP - MP CALCIUM GREASE

Thickened by calcium stearate with mineral oil. This Calcium Base Grease has excellent water resistant property, mechanical stability and lubricating performances.

### FEATURES AND BENEFITS

Particular anti-water property of calcium stearate soap. Can be applied to damp and water presented environment, Perfect and well distributed fibre structure of its thickener offer preferable structure characteristic of grease with shear force. Do not contain any heavy metal, nitrite and other chemicals that will do harm to human's health and pollute environment.

### CALCIUM GREASE EP 2

Meets and exceeds for EP2 ISO 6743-9 L-XBEHB 2, DIN 51502 KP2P-20



#### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	2
Color	Visual	Yellow-Brown-Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-25 to 140
Penetration @ 25°C, 0.1 mm	ASTM D217	265 -295
Dropping point, °C	IP 396/DIN ISO 2176	≥175
Kinematic viscosity of the base oil @40°C, mm2/s	ASTM D445	165

### CALCIUM GREASE EP 3

Meets and exceeds for EP3 ISO 6743-9 L-XBDHB 3, DIN 51502 P3N-20



#### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	3
Color	Visual	Yellow-Brown-Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-30°C to +130°C
Penetration @ 25°C, 0.1 mm	ASTM D217	220-250
Dropping point, °C	IP 396/DIN ISO 2176	≥140
Kinematic viscosity of the base oil @40°C, mm2/s	ASTM D445	165



## CALCIUM GREASE MP 2

Meets and exceeds for MP2 ISO 6743-9. L-XBCEA 2, DIN 51502 K2K-25



### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	2
Color	Visual	Yellow-Brown-Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-25 to 120
Penetration @ 25°C, 0.1 mm	ASTM D217	265-295
Dropping point, °C	IP 396/DIN ISO 2176	≥100
Kinematic viscosity of the base oil @40°C, mm <sup>2</sup> /s	ASTM D445	151

## CALCIUM GREASE MP 3

Meets and exceeds for MP3 ISO 6743-9: L-XBCEA 3, DIN 51502 KPIK-30



### TYPICAL PROPERTIES:

TEST	TEST METHOD	RESULT
NLGI Grade	ASTM D217	3
Color	Visual	Yellow-Brown-Black
Appearance	Visual	Smooth
Operating Temperature range, °C	-	-25 to 120
Penetration @ 25°C, 0.1 mm	ASTM D217	200-250
Dropping point, °C	IP 396/DIN ISO 2176	≥100
Kinematic viscosity of the base oil @40°C, mm <sup>2</sup> /s	ASTM D445	148





**MASSÖL**

نور القداح للتجارة العامة ش.ذ.م.م

**NOOR** **ALKADDAH**  
GENERAL TRADING L.L.C.

Website: [www.nooralgaddah.com](http://www.nooralgaddah.com)

Loc: AL HABTOOR NAIF BUILDING, Office No. M 10,  
Deira, Dubai - United Arab Emirates.