



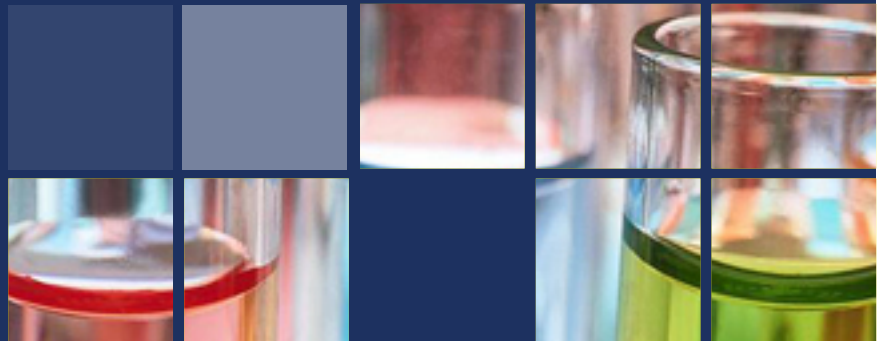
GULFRAY

GULFRAY Corporation

Envisioning Tomorrow



Lubricants Catalog 2011



Envisioning a Brighter Tomorrow

**Superior products
at competitive
prices**

**Robust
supply chain
management**

**Qualified staff for
technical support**

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INTRODUCTION



We are pleased to welcome you to our latest automotive lubricants catalog.

At GULFRAY, we strive to ensure that oils carrying our brand are flawlessly produced to provide safety, reliability and protection for all driving, marine and industrial applications. Those oils are produced from superior base oils together with specially engineered additive systems. Their chemistry permits superior lubrication to all moving parts during cold start up. At high operating temperatures, they maintain their lubricity and thermal stability to provide a highly efficient lubricating film for engine parts, and prevent sludge formation and oxidative thickening. Our main priority is to ensure that every batch delivered to our client is produced to match or exceed the most stringent international specifications.



Our superior products sail from the shores of the **Gulf** carrying our brand to our clients across the globe. Every batch carrying the name of "**GULFRAY**" is produced to the most stringent international specifications.

GULFRAY GASOLINE GRADES

GULFRAY SUPER PLUS

GULFRAY SUPER PLUS is a premium multigrade gasoline engine oil developed for engines which operate under severe load conditions. It is primarily intended for modern gasoline engine, but can also be used in natural aspirated and turbo charged diesel engines.

GULFRAY SUPER PLUS is blended with highly quality base oils and carefully selected and well balanced additive package. It is characterized by:

- Maximum protection against engine wear and corrosion
- Excellent sludge and oxidation resistance.
- Helps prolong engine life by minimizing rust and varnish formation.
- Excellent detergency and dispersancy to keep the engine clean.
- Extremely shear stable Viscosity Index Modifies to ensure the needed viscosity level both during summer and winter.

GULFRAY SUPER PLUS meets or exceeds the performance requirements of:

- API SJ /CF4
- CCMC G4/D4/PD2
- ACEA A2-96 issue2/B2-96/E2-96 issue 2
- MERCEDES BENZ 228.1
- MAN 271

Typical Characteristics	
SAE GRADE	20W50
Density @ 15 °C, g/cm3	0.8848
Flash Point COC, °C	248
Pour Point, °C	-21
Kinematic Viscosity @ 40 °C, cSt	159.59
Kinematic Viscosity @ 100 °C, cSt	18.62
Viscosity Index	131

GULFRAY PREMIUM

GULFRAY PREMIUM is a multigrade gasoline engine oil which operate under mild to moderate conditions both during summer and winter. It is formulated with highly refined base stocks together with selected and balanced additive package. It is characterized by:

- Excellent chemical stability to resist the oil thickening due to oxidation under high temperatures and severe operating conditions.
- Helps prolong engine life by minimizing corrosion, rust, and sludge and varnish formation.
- Good detergency and dispersancy to keep the engine clean.
- Excellent anti-wear properties to improve the lubricity of protective oil film on vital engine moving parts.
- Excellent shear stable viscosity modifiers to ensure consistent viscosity level.

GULFRAY PREMIUM motor oil is best suited for passenger vehicles requiring the protection level of API SF/CC and the wide viscosity range of SAE 20W/50. GULFRAY PREMIUM motor oil meets or exceeds the performance requirements of:

- API SF/CC
- CCMC G2/PD1
- MIL-L-2104 B
- MIL-L-46152 C
- MERCEDES BENZ 226.1

Typical Characteristics	
SAE GRADE	20W/50
Density @ 15 °C, g/cm3	0.8824
Flash Point COC, °C	230
Pour Point, °C	-15
Kinematic Viscosity @ 40 °C, cSt	162.14
Kinematic Viscosity @ 100 °C, cSt	18.08
Viscosity Index	124



GULFRAY ULTRA



GULFRAY ULTRA is formulated to fully satisfy the lubrication requirements of automotive engines. It is specially made to be ideal for both diesel and gasoline engines. This lubricant is recommended for naturally aspirated gasoline and diesel engines, in passenger cars and commercial vehicles. GULFRAY ULTRA is formulated using highly refined base stocks. Those are selectively chosen to ensure a high level of engine protection. Additionally, a well balanced additive package system is added to greatly enhance the quality of the base oil. This combination makes GULFRAY ULTRA ideal for engines operated under heavy duty and in very high temperatures. Every batch of GULFRAY ULTRA is thoroughly tested to ensure that it consistently provides the following benefits:

- Sufficient detergency to keep the engine clean
- Prevents the formation of deposits by using chemical disperants
- Provides corrosion protection to the engine using special anti-corrosion components
- Ensures a long engine life by minimizing its wear
- Inhibits any harmful oxidation using selected anti-oxidant additives

GULFRAY ULTRA series are blended at the viscosity monogrades SAE 40 and SAE 50 levels to meet different temperature operating conditions. GULFRAY ULTRA is suited for cold and very hot climate conditions.

Typical Characteristics		
SAE GRADE	40	50
Density @ 15°C, g/cm3	0.882	0.890
Flash Point, (COC) °C	202	205
Pour Point, °C	-5	-5
Kinematic Viscosity @40°C, cSt	134.8	187.92
Kinematic Viscosity @ 100°C, cSt	13.9	17.34
Viscosity Index	99	99



GULFRAY MAX



GULFRAY MAX is superior quality and high performance multigrade gasoline crankcase oil. It is especially developed for use in engines operating under severe conditions. It is formulated with premium mineral base stocks and high performance additive package system. GULFRAY MAX is formulated to guarantee the following benefits:

- High thermal and high oxidation stability thereby minimize the oil thickening.
- Protection against wear, prolong the engine life.
- Inhibiting properties against rust, corrosion & varnish formations.
- Excellent prevention of piston deposits and sludge formation.
- Sufficient detergency and dispersancy to keep the engine clean.
- Extremely shear stable Viscosity Index Modifies to ensure consistent performance during summer and winter.

GULFRAY MAX is blended at API SL/CF and viscosity multigrades SAE 20W/50 to meet cold winter and hot summer operating conditions.

Typical Characteristics	
SAE GRADE	20W50
Density @ 15 °C, g/cm3	0.885
Flash Point COC, °C	246
Pour Point, °C	-27
Kinematic Viscosity @ 40 °C, cSt	146.01
Kinematic Viscosity @ 100 °C, cSt	17.85
Viscosity Index	135



GULFRAY DIESEL GRADES





GULFRAY ULTRA



GULFRAY ULTRA is formulated to fully satisfy the lubrication requirements of automotive engines. It is specially made to be ideal for both diesel and gasoline engines. This lubricant is recommended for naturally aspirated gasoline and diesel engines, in passenger cars and commercial vehicles. GULFRAY ULTRA is formulated using highly refined base stocks. Those are selectively chosen to ensure a high level of engine protection. Additionally, a well-balanced additive package system is added to greatly enhance the quality of the base oil. This combination makes GULFRAY ULTRA ideal for engines operated under heavy duty and in very high temperatures. Every batch of GULFRAY ULTRA is thoroughly tested to ensure that it consistently provides the following benefits:

- Sufficient detergency to keep the engine clean
- Prevents the formation of deposits by using chemical dispersants
- Provides corrosion protection to the engine using special anti-corrosion components
- Ensures a long engine life by minimizing its wear
- Inhibits any harmful oxidation using selected anti-oxidant additives

GULFRAY ULTRA series are blended at the viscosity monogrades SAE 40 and SAE 50 levels to meet different temperature operating conditions. GULFRAY ULTRA is suited for cold and very hot climate conditions.

Typical Characteristics		
SAE GRADE	40	50
Density @ 15°C, g/cm3	0.882	0.890
Flash Point, (COC) °C	202	205
Pour Point, °C	-5	-5
Kinematic Viscosity @40°C, cSt	134.8	187.92
Kinematic Viscosity @ 100°C, cSt	13.9	17.34
Viscosity Index	99	99



GULFRAY ENDURE



GULFRAY ENDURE is monograde, high performance diesel crankcase oil used in turbo charged and naturally aspirated diesel & gasoline engines in long haul trucks, vans, and passenger cars.

GULFRAY ENDURE oil is formulated using highly refined base stocks and well balanced chemical additive system, which is characterized by

- High resistance to oil oxidation and inhibits the resultant oil thickening.
- High level of wear protection.
- Excellent level of engine cleanliness
- Inhibits rust & corrosion.

GULFRAY ENDURE oil meets or exceeds following specifications:

- API CD/SF
- MIL-L-2104D
- MIL-L46152 D
- CCMC G2, PD1, PD2
- MERCEDES BENZ 227.0
- MAN 270

Typical Characteristics			
SAE GRADE	30	40	50
Density @ 15 °C, g/cm3	0.884	0.889	0.893
Flash Point, (COC) °C	225	231	239
Pour Point, °C	-15	-12	-12
Kinematic Viscosity @40°C, cSt	90.34	126.0	196.48
Kinematic Viscosity @ 100°C, cSt	10.94	13.52	18.03
Viscosity Index	106	102	100



GULFRAY POWER



GULFRAY POWER is multigrade, mid performance diesel crankcase oil used in turbo-charged and naturally aspirated diesel & gasoline engines in long haul trucks, light duty vans, and passenger cars.

GULFRAY POWER is formulated using highly refined base stocks and well balanced chemical additive system, which is characterised by

- Good resistance to oil oxidation and inhibits the resultant oil thickening.
- Good level of wear protection.
- Good level of engine cleanliness
- Inhibits rust & corrosion.

GULFRAY POWER meets or exceeds following specifications:

- API CD/SF
- MIL-L-2104D
- MIL-L46152 D
- CCMC G2, PD1, PD2
- MERCEDES BENZ 227.1



GULFRAY POWER can be used around the year and is best suited for mixed fleets of cars and trucks. GULFRAY POWER is also suitable for Marine Engines requiring API CD oil or detergent oil of MIL-L-2104 D level.

Typical Characteristics	
SAE GRADE	15W/40
Density @ 15 °C, g/cm3	0.8772
Flash Point, (COC) °C	226
Pour Point, °C	-24
Kinematic Viscosity @40°C, cSt	106.49
Kinematic Viscosity @ 100°C, cSt	14.50
Viscosity Index	140



GULFRAY OTHER GRADES





GULFRAY GEAR OIL



GULFRAY GEAR OIL “GL-1” is a gear oils intended for light duty applications, which do not require extreme pressure protection. It is used in passenger cars, commercial vehicles and off-highway equipment.

GULFRAY Gear Oil characterized by:

- Natural resistance against oxidation
- Anti-foaming behavior
- Compatibility with elastomers

GULFRAY Gear Oil meets the performance requirements of:

- API GL-1 Specs.

Typical Characteristics		
SAE GRADE	90	140
Density @ 15 °C, g/cm3	0.887	0.898
Flash Point, (COC) °C	238	247
Pour Point, °C	-12	-9
Kinematic Viscosity @40°C, cSt	16.08	28.12
Kinematic Viscosity @ 100°C, cSt	172.57	403.07
Viscosity Index	96	96



GULFRAY GEAR TURBO



GULFRAY GEAR TURBO is designed to meet the requirement of “API GL-4. It is suitable to use in various gear units with spur, bevel or helical gears used in synchronized manual gear boxes, transmissions and axles, intermediate gear boxes, & power take-off’s working under moderately severe loads and pressure.

GULFRAY Gear TURBO is also applicable for hypoid gear boxes used passenger cars, light and heavy trucks, off-highway equipment.

GULFRAY Gear TURBO is carefully blended with a selected and well balanced chemical additive package, it is characterized by:

- Minimize the driveline component wear
- Good oxidation and thermal stability
- Protects against corrosion & rust
- Reasonably smooth gear shifting
- Good compatibility with elastomer seals

GULFRAY Gear TURBO meets the following specifications:

- API GL-4
- MIL-L-2105D
- MERCEDES BENZ 235.1
- U.S. Steel 225

Typical Characteristics			
SAE GRADE	80W-90	90	140
Density @ 15 °C, g/cm3	0.8886	0.903	0.906
Flash Point, (COC) °C	208	240	248
Pour Point, °C	-18	-12	-9
Kinematic Viscosity @40°C, cSt	158.59	162.93	385.98
Kinematic Viscosity @ 100°C, cSt	16.04	15.54	27.42
Viscosity Index	105	97	97



GULFRAY GEAR MAX



GULFRAY GEAR MAX is designed to use in hypoid, bevel & spiral gears units, axle and final drives operating under high speed-shock load, high speed-low torque & low speed-high torque conditions over wide range of operating temperatures.

GULFRAY GEAR MAX is applicable for hypoid gear boxes used in passenger cars, light and heavy duty trucks, buses & off-highway equipment.

GULFRAY GEAR MAX is carefully blended with a selected and well balanced chemical additive package, it is characterized by:

- Excellent wear protection under severe load conditions
- Excellent oxidation and thermal stability
- Excellent protection against corrosion & rust
- Sufficient smooth gear shifting
- Enhanced compatibility with elastomer seals

GULFRAY GEAR MAX meets the following specifications:

- API GL-5
- MIL-L-2105D
- MERCEDES BENZ 235.1

Typical Characteristics			
SAE GRADE	80W-90	90	140
Density @ 15 °C, g/cm3	0.8872	0.887	0.898
Flash Point, (COC) °C	202	220	236
Pour Point, °C	-18	-12	-9
Kinematic Viscosity @40°C, cSt	158.75	162.35	390.18
Kinematic Viscosity @ 100°C, cSt	15.68	15.48	27.27
Viscosity Index	102	96	95



GULFRAY HYDRAULIC



GULFRAY HYDRAULIC Oils are premium multipurpose hydraulic fluids conforming to the international classification ISO TYPE HM, designed for modern high pressure & highly stressed hydraulic systems, precision machine tools, industrial equipment and all circulating lubrication systems.

GULFRAY Hydraulic oil formulated with highly refined base stocks and full additive treatment to impart high level anti-wear performance and meet filtration requirements for most hydraulic systems. GULFRAY Hydraulic oil has the following benefits:

- Excellent wear protection
- Excellent oxidation resistance & thermal stability
- Excellent compatibility elastomer seals
- Sufficient resistance for foam build up
- Well filterability
- Inhibits corrosion & rust

GULFRAY Hydraulic oils meets or exceed the major hydraulic pump and machine manufactures:

- ISO 6743/4, category HM
- Cincinnati Milacron P-68,P69 & P-70
- DIN 51524, Part 2, category HLP
- Denison HF-0, HF-2
- Sperry Vickers 1-286-S
- U.S. Steel 136

Typical Characteristics			
SAE GRADE	32	46	68
Density @ 15 °C, g/cm3	0.8676	0.8708	0.8792
Flash Point, (COC) °C	220	232	250
Pour Point, °C	-24	-21	-18
Kinematic Viscosity @40°C, cSt	32.24	46.75	67.76
Kinematic Viscosity @ 100°C, cSt	5.60	6.96	9.12
Viscosity Index	112	105	110
Foam Test, ASTM D 892	Pass	Pass	Pass
Demusibility, ASTM D 1401	Pass	Pass	Pass



GULFRAY MULTI-PURPOSE GREASE



GULFRAY MULTI-PURPOSE GREASE is a premium quality Lithium base grease, produced from high quality base oils and selected additives. It is intended for the general use in automotive and industrial applications. GULFRAY Multi-Purpose grease is recommended for all types of plain and roller bearings.

GULFRAY MULTI-PURPOSE GREASE have the following performance:

- Excellent mechanical and oxidation stability to minimize the leakage and premature softening of the Grease.
- Outstanding rust and corrosion protection, that minimizes the corrosion effects and protects against rust during storage.
- Excellent water resistance and will not wash off easily during application.
- Sufficient sealing which provides protection to equipment’s operating in dusty or wet conditions.

Typical Characteristics		
NLGI Class	NLGI- 2	NLGI-3
Soap Type	Lithium	Lithium
Texture / Appearance	Smooth/ Clear	Smooth/Clear
Colour	Amber	Amber
Dropping Point, ASTM D566	192	194
Worked Penetration @25°C	276	239



GULFRAY EP GREASE



GULFRAY EP GREASE is premium quality lithium complex soap grease, fortified with extreme pressure additive, anti-oxidant & rust inhibitors. It has excellent thermal and mechanical stability, & imparts wear protection.

GULFRAY EP Grease has been formulated for use in plain & rolling bearings used in automotive and industrial equipment. It may be used at continuous operating temperature between -20 °C & 130 °C. GULFRAY EP GREASE has the following advantages:

- Universal Use (multipurpose)
- Good wear protection
- High load carrying capacity
- Good pumpability
- Resistance to oxidation
- High Adherence, hence resistant to wash off easily by water.
- Surfaces protection against corrosion

GULFRAY EP GREASE is particularly recommended to lubricate the hubs of vehicles’ wheels. It is also recommended to use in:

- Bearing of Rolling-mills
- Paper-mill equipments
- Bearings of quarries equipment serving under severe conditions

Typical Characteristics		
NLGI Class	NLGI- 2	NLGI-3
Soap Type	Lithium	Lithium
Texture / Appearance	Smooth /Clear	Smooth /Clear
Colour	Amber	Amber
Dropping Point, ASTM D566	190	192
Worked Penetration @25°C	282	236

GULFRAY CHASSIS GREASE

GULFRAY CHASSIS GREASE is highly suitable for general chassis lubrication of automotive vehicles, tractors, agricultural equipment, bicycles, farm equipment and bearing in water pumps. This is a calcium soap base, water resistant adhesive grease, which is high in performance and quality.

GULFRAY CHASSIS GREASE has the following advantages:

- Universal Use (multipurpose)
- Good wear protection
- High load carrying capacity
- Resistance to oxidation
- High Adherence, hence resistant to wash off easily by water.
- Surfaces protection against corrosion

Typical Characteristics	
Texture	Smooth
Color	Cream
Soap Type	Calcium
Drop Point °C	90 (max)
Worked Penetration @ 25°C	220-250

GULFRAY Lubricants

Your Safety
In The Right
Hands

GULFRAY Corporation



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