PANTHER



GALAXY LUBRICANTS has been setting the standards for continuous innovation, research and development and consistency in delivering world-class products in the lubricants industry. For over two decades, GALAXY LUBRICANTS has been the leading total lubrications solution provider creating dependable energy efficient products engineered to enhance productivity across industries.

With a growth rate of 20% annually, GALAXY LUBRICANTS, is one of the fastest growing companies in the UAE. Equipped with state-of-the-art production facility, GALAXY LUBRICANTS is one of the regions largest manufacturer of lubricants with a comprehensive line of leading edge premium lubricants ideal for use in a diverse range of industries.

Exporting to over 25 countries in 4 continents, GALAXY's Panther series branded lubricants have made a profound mark in the lubricants industry.

GALAXY LUBRICANTS has invested heavily in research & technology as well as in human resource development. All the employees are experts in their fields and are highly trained. The management is very progressive and is constantly striving to improve product value for the customers and provide a level of service that is beyond comparison.

With a state of art warehousing and logistic infrastructure, we provide our customers with timely and ready solutions helping our clients experience our advantage.





Panther Series - Gasoline Engine Oil

It is a unique engine lubricant specifically formulated to meet high performance requirements of the latest model car and trucks. This product was specially designed for use in sports cars and luxury vehicles that require highly stable engine oil that will withstand the most extreme demanding performance criteria. It is so thoroughly tested that it is been approved by the internationally recognized organization known as the API (American petroleum Institute) and their department called the Eolcs. This product carries the full donut approval for API SL/CF-4 and energy conserving (EC).

Performance Level

API SL/CF-4, MIL-L-46152D, CCMC G5/PD2

Benefits and Advantages

- Improved fuel economy & power output
- · Reduced emissions
- Enhances life of crankcase
- Extended drain capability
- Superior lubrication increased engine life down.

Typical Properties

SAE Grade	Test Method	15W-40	20W-50	20W-60	
Viscosity@100°C, cSt	ASTM D 445	15.19	19.77	23.75	
Viscosity@40°C, cSt	ASTM D 445	120.9	191.3	277.2	
Viscosity Index	ASTM D 2270	130	119	107	
Pour Point	ASTM D 97	-27	-24	-15	
Flash Point, PMCC, C min	ASTM D 92	>220	>230	244	
Density @15C, Relative	ASTM D 1298	0.882	0.882	0.808	



Panther Series - Gasoline Engine Oil

It is high quality motor oil intended for use in passenger cars that have normally aspirated engines or turbo-charged engines. These oils are most suitable for new cars and light trucks that require multi-grade properties. It meets and exceeds the requirements of API SJ/CF as well as the G5 and PD2 requirements of CCMC/ACEA. It also exceeds the car manufacturers engine oil performance criteria. This motor oil is specifically designed to provide extra protection against corrosion, oxidation, sludge and rust. The built-in viscosity improver protects in extreme weather conditions.

Performance Level

API SJ/CF, MIL-L-4152D, CCMC G5/PD2

Benefits and Advantages

- Lowers oil consumption
- Provides a cleaner & smoother running engine
- Enhances life of crankcase
- Protects against rust and corrosion

SAE Grade	Test Method	15W-40	20W-50	20W-60	
Viscosity@100°C,cSt	ASTM D 445	15.19	19.77	23.75	
Viscosity@40°C, cSt	ASTM D 445	120.9	191.3	277.2	
Viscosity Index	ASTM D 2270	130	119	107	
Pour Point	ASTM D 97	-27	-24	-15	
Flash Point, PMCC, C min	ASTM D 92	>220	>230	244	
Density @15C, Relative	ASTM D 1298	0.882	0.882	0.808	





Panther Series - CNG Engine Oil

GALAXCY Panther CNG is a premium multi-grade lubricant specifically designed for use in compressed natural gas (CNG). It is specifically formulated to provide reliable protection for trucks, buses, passenger cars and other commercial vehicles using Compressed Natural Gas (CNG). It is formulated from high quality base stocks and a balanced additive system. This advanced medium ash formulation provides excellent oxidation, nitration, and thermal stability to minimize combustion chamber ash deposits. It lubricates with less varnish, sludge, and carbon build-up under the most severe operating conditions.

- High thermal and oxidation stability helps control sludge build-up and deposits.
- Shear stability reduces oil consumption.
- Effective detergency/dispersancy keeps engines cleaner.
- · Low levels of Zinc and Phosphorous help extend catalytic converter life.
- Longer drain capability compared to conventional fleet engine oils.
- Excellent resistance to foaming and corrosion.

Typical Properties

SAE Grade	Test Method	20W-40	20W-50	40
Viscosity@100°C, cSt	ASTM D 445	15.19	19.77	14.5
Viscosity@40°C, cSt	ASTM D 445	120.9	191.3	142
Viscosity Index	ASTM D 2270	130	119	96
Pour Point	ASTM D 97	-27	-24	-15
Flash Point, PMCC, C min	ASTM D 92	>220	>230	224
Density @15C, Relative	ASTM D 1298	0.882	0.882	0.893



Panther Series - Diesel Engine Oil

GALAXY Panther diesel engine oil is manufactured to provide premium all round performance in diesel engines used for the road transport and construction industries. It provides excellent all weather protection and controls the emissions in high-speed engines. It is blended with the latest additive technology and recommended by OEM'S for use in European, American and Japanese manufactured engines.

Performance Level

PI CH-4/CG-4/CF-4/CF/SJ - ACEA E3-96 ISSUE 3 - ACEA A3-98/ B3-98 ISSUE 2/B4-02 - VOLVO VDS 2 RENAULT VI RD - MACK E0-M - ALLISON C-4 (LEVEL) - MB 228.2/3 - MB 229.1 - MAN M3275 MTU/DDC TYPE 2 - CUMMINS 20071/20072

Benefits and Advantages

- · High alkalinity reserve
- Advanced additive technology
- Control of low temperature sludge and deposits
- · Low emission technology

SAE Grade	Test Method	15W-40	20W-50	
Viscosity@100°C, cSt	ASTM D 445	14.3	19.5	
Viscosity@40°C, cSt	ASTM D 445	141	182.6	
Viscosity Index	ASTM D 2270	130	123	
Pour Point	ASTM D 97	-23	-21	
Flash Point, PMCC, C min	ASTM D 92	222	235	
Total Base Number	ASTM D 2896	12.0	12.0	



Panther Series - Gear Oil

Advance quality gear oil specialized gear lubricant contains highly developed sulphur-phosphorous extreme pressure (EP) additives that are designed to meet rigorous demands of commercial-fleet manual transmissions, drive axles and final drives. Its special additive technology assures an excellent protection against metal-to-metal contact of the gears under the most severe operating conditions, even under shock loads. This product is highly suitable for heavy earth moving equipment, farm equipment and passenger cars. It provides excellent chemical and thermal stability at elevated bulk oil temperatures, good performance at low temperatures, and has demonstrated good rust protection resulting from water contamination and wet conditions. Furthermore, the viscosity grades have excellent low temperature fluidity for an optimum performance during all seasons. It shows an excellent oxidation and thermal stability and seals are not affected by this product.

Recommended for use in hypoid or spiral bevel gear differentials and industrial gear units. Heavy-duty manual transmissions, axles. On-highway light and heavy-duty trucks, busses, vans, and cars. Off-highway industries including: construction, mining, quarrying, and agriculture. Other heavy-duty industrial and automotive applications involving hypoid and other gears.

Performance Level

API GL-5/MT-1, BTR 5M-31, MIL-L-2105D, ZF TE ML-01/02/05/07/08

Typical Properties

SAE Grade	Test Method	75W-90	75W-80	85W-140	80W-90	140	90
Viscosity@100°C, cSt	ASTM D 445	16.35	7.540	28.0	14.5	28.0	14.5
Viscosity@40°C,cSt	ASTM D 445	112.3	53.23	387.0	137.0	387.0	137.0
Viscosity Index	ASTM D 2270	157	107	98	105	98	105
Pour Point	ASTM D 97	-42	-39	-21	- 27	-9	-12
Density @15C, Relative	ASTM D 1298	0.889	0.866	0.903	0.892	0.903	0.892



Panther Series - Hydraulic Oil

Anti-wear hydraulic fluid formulated from severely hydrotreated mineral oils and an ashless additive system that provides superior oxidation stability, water separability, foam suppression and protection against wear, rust and corrosion. Specifically designed for use in environmentally sensitive areas.

Application

Vane, piston and gear-type pumps • Mobile and stationary hydraulic equipment situated in environmentally sensitive areas • Can and bottle handling machinery • Agricultural harvesters • Hydraulic systems in meat, fish and poultry plants • Logging, pulp and paper & timber mills • Quarrying, mining and earthmoving • Waste management

Benefits and advantages

Good water demulsibility
Reduced wear – protects against friction, corrosion and rust
Superior oxidation & thermal stability
Excellent anti-foam properties

SAE Grade	Test Method	22	32	46	68	
Viscosity@100°C, cSt	ASTM D 445	4.2	5.4	6.7	8.6	
Viscosity@40°C, cSt	ASTM D 445	21.0	30.5	44.0	65.0	
Viscosity Index	ASTM D 2270	101	109	106	104	
Pour Point	ASTM D 97	-36	-33	-33	-30	
Flash Point, PMCC, C min	ASTM D 92	190	210	220	226	
Density @15°C	ASTM D 1298	0.850	0.871	0.876	0.880	



Panther Series - Automatic Transmission Fluid

It is highly refined fluid made from solvent base oils, viscosity index improvers, anti-oxidants, anti-wear agents, detergents, defoaments and special friction modifiers. This highly advanced ATF can be used in applications such as power steering systems, hydraulics and hydrostatic systems.

- Outstanding resistance to corrosion, foaming, shearing and rust formation.
- High degree of anti-wear and extreme pressure properties
- Outstanding friction and heat transfer properties
- Perfect behaviour at low temperature
- Proven compatibility with elastomers (seals)
- Superior oxidation resistance

Typical Properties

SAE Grade	Test Method	Type A	Dex II	Dex III	
Viscosity@100°C, cSt	ASTM D 445	7.0	7.0	7.1	
Viscosity@40°C, cSt	ASTM D 445	42.7	39.0	34.8	
Viscosity Index	ASTM D 2270	100	162	178	
Pour Point	ASTM D 97	- 32	-36	-41	
Flash Point, PMCC, C min	ASTM D 92	196	216	176	
Density @15C, Relative	ASTM D 1298	0.87	0.86	0.85	



Panther Series - Antifreeze/Coolant

GALAXY Panther Antifreeze/Coolant is recommended for use in liquid cooling systems of automotive and industrial gasoline and diesel engines. They are available in various concentrations ready for use. The higher boiling points are beneficial in hot weather and at high altitudes.

Application

It protects cooling systems of gasoline and diesel engines against rust in all seasons. They provide ideal cooling, effective protection against corrosion and scale deposit formation in the cooling systems year-round, resulting in longer radiator life and lower maintenance cost.

Benefits and advantages

High boiling point gives better cooling performance in high temperature condition

Excellent anti-foam properties

Withstands freezing at low temperatures

Protects the radiator against rust & corrosion

Provides year round cooling and anti-freeze properties

Concentration	Test Method	30	40	50	95
Freezing Point	ASTM D 97	-15	- 25	- 37	-51
Boiling Point	ASTM D 1120	102	105	107	170
Density @15C. Relative	ASTM D 1298	1.013	1.040	1.055	1.116





GALAXY Brake Fluid DOT-3

It is a high quality brake fluid blended from glycol ethers and Polyglycols. It is formulated to contain oxidation and corrosion inhibitors to enhance its chemical stability.

- · Consistent and safe brake performance under high braking pressure.
- Reduces leakage and loss of fluid to a minimum
- Improved life and reliability of brake system components

Meets or exceeds all passenger car and light truck manufacturer's warranty requirements for vehicles or brake systems where an FMVSS No. 116 DOT 3, SAE J1703, ISO 4925 Class 3 brake fluid is specified.

Benefits & Advantages

- High boiling point to prevent vapour forming in brake systems
- Firm braking pressure in all operating conditions
- · Excellent chemical stability
- · Protects metals and rubbers used in brake and hydraulic systems

Typical Properties

Test	Test Method	Result
Viscosity at 40°C, cSt	ASTM D-445	1250
Boiling Point (ERBP), min °C (°F)	SAE J-1703	265
Appearance		Pale Yellow
рН	FVMSS-116	7.5 - 10.0
Flash Point, COC, min °C (°F)	ASTM D-92	121 (250)
Specific Gravity, 60°F	ASTM D-1298	1.032



Panther Series - Multipurpose Grease

A multipurpose grease which includes extreme pressure additives offering excellent oxidation stability, rust protection, wear protection and good resistance to water. It can carry high loads and is recommended for heavily loaded anti-friction and plain bearings on industrial and automotive equipments.

NLGI Grade	No. 2	No. 3
Soap type	Lithium	Lithium
Appearance	Light Yellow / Amber Green	Light Yellow / Amber Green
Oil Viscosity @ 40°C	cSt 180 - 220	cSt 180 - 220
Cone penetrated (worked)	272	232
Dropping Point °C	207	208
Corrosion to copper strip (25°C x 24 hr)	Negative	Negative
Worked Stability (100,000 strokes)	287	250
Tinken load	55 lbs.	55 lbs.
Oxidation stability, PSI (98.9C x 100 hr)	7.1	7.5
Difference, 60 and 10,000	+9	+10
Difference, 60 and 100,000	+15	+18
Water by distillation, %	0.05	0.05
Soap content,%	9	12

GALAXY LUBRICANTS



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