CHEVRON GROUP II/II+ BASE OILS

FOR FORMULATING PREMIUM PRODUCTS

Chevron Group II/II+ base oils are ideal choices for lubricant manufacturers seeking to meet tightening specifications, optimize blending alternatives and maximize automotive and industrial products they formulate for the market. In short, these products provide excellent value for blenders.

PURITY FOR PERFORMANCE AND SAVINGS

The quality of base oil depends on the manufacturing process. Chevron's high-purity Group II/II+ base oils, produced with the company's patented ISOCRACKING®/ ISODEWAXING®/ISOFINISHING® technologies, can help lubricant formulators meet stringent US and European technical requirements.

These base stocks have exceptional oxidation stability, low volatility in their viscosity grade and are essentially sulfur-free. As a result, you can produce a broad viscosity range of higher performing lubricants while minimizing or completely eliminating the need for more expensive Group III base oils.

MANUFACTURED GLOBALLY FOR SUPPLY RELIABILITY

Chevron produces a full slate of premium Group II/II+ oils at two strategically located refineries, with a third plant under construction. These base oils are shipped to four regional supply hubs, which serve the world's most significant lubricant markets.

HEAVY DUTY MOTOR OIL (HDMO)

BALANCE FUEL ECONOMY WITH WEAR PROTECTION

Fuel economy improves when lubricants are blended with lower viscosity base oils. But large diesel engines, operating at low speeds and very high torque, need heavy-duty lubrication. Chevron premium Group II/II+ base oils fill the performance gap. With higher viscosity for extended wear protection, the purity to meet tightening environmental regulations, and being effectively sulfur-free, they are preferred for meeting Mid and Low SAPS HDMO requirements in Europe.

PASSENGER CAR MOTOR OIL (PCMO)

LOWER FORMULATING COSTS WITH GROUPII/II+/III BLENDS

You can lower costs for your largest volume lubricants by blending with up to 100% Group II/II+ base oils. Through precise formulation work with your additive company, the level of Group III can be optimized, and in some cases eliminated, for cost savings with no compromise in performance.

IMPROVE ECONOMICS, TRANSITION TO MULTIGRADE

To improve fuel economy, lubricant marketers in emerging markets are transitioning from monograde or heavy multigrade motor oils to lighter, premium-quality lubricants. In many heavier PCMO formulations, you can replace Group I with Group II/II+ for reduced costs and simplified blending. As you move to 5W lubricants, blending with Group II/II+ enables you to minimize the amount of Group III needed.

INDUSTRIAL OILS

EXTEND OIL LIFE, IMPROVE PERFORMANCE

Industrial oils often require heavier base stocks, but in some applications the purity and oxidation stability of Chevron's Group II base oils can boost performance significantly. In those cases, replace Group I base oils with Group II, and extend oil life by as much as 300%, typically with minimal or no requalification cost. If you're formulating with Group III base stocks, in most situations you can substitute a lower-cost Group II without losing performance. Major additive companies are experienced at optimizing industrial oil performance with Chevron base oils.

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GROUP II/II+ TEST DATA

Chevron's premium base oils have exceptional oxidation stability, low volatility for a given viscosity grade and are virtually sulfur-free, making them an excellent choice for blending high-performance, low-SAPS automotive engine oils, as well as process and industrial oils.

Typical Properties	Methods	100R	220R	600R
API Base Oil Category	API 1509 E.1.3	Group II+	Group II	Group II
Appearance	SM 360-99	Bright & Clear	Bright & Clear	Bright & Clear
Color	ASTM D 1500	L0.5	L0.5	L0.5
API Gravity, deg.	ASTM D 4052	36.0	32.1	31.2
Density, lb/gal	ASTM D 4052	7.03	7.20	7.28
Density, kg/l	ASTM D 4052	0.844	0.865	0.874
Specific Gravity @ 60°F/60°F	ASTM D 4052	0.845	0.865	0.874
Viscosity @ 40°C, cSt	ASTM D 445	21.2	42.7	108
Viscosity @ 100°C, cSt	ASTM D 445	4.4	6.6	12.2
Viscosity @ 100°F, SUS	ASTM D 2161	113	220	590
Viscosity Index	ASTM D 2270	117	106	103
CCS @ -20°C, cP	ASTM D 5293	822	3200	N/A
CCS @ -25°C, cP	ASTM D 5293	1300	5600	N/A
CCS @ -30°C, cP	ASTM D 5293	2450	N/A	N/A
Pour Point, °C	ASTM D 5950/1C	-15	-15	-17
Flash Point, COC, °C	ASTM D 92	220	230	270
Volatility, wt. % distilled at 700°F/371°C	ASTM D 2887	Report	N/A	N/A
Brookfield Visc at -40C, cP	ASTM D 2983	12000	N/A	N/A
Evaporative loss, Noack, wt.%	ASTM D 5800 (B)	16	9	2
Water, ppm	ASTM D 6304-98	<50	<50	<50
Sulfur, ppm	ICP/XRF	<6	<6	<10
Saturates, HPLC wt.%	Chevron	>99	>99	>99
Aromatics, HPLC wt.%	Chevron	<1	<1	<1

Contact us to request a sample or get more information about specifications, applications and delivery.

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