



CHEVRON NEUTRAL OIL

60R, 110RLV, 100R, 150R, 220R, 600R

PRODUCT DESCRIPTION

Chevron Neutral Oils are all-hydroprocessed, Group II/II+ paraffinic base oils that can be used in blending in a variety of lubricant and process oils.

CUSTOMER BENEFITS

Chevron Neutral Oils deliver value through:

- **High viscosity index**
- **Good volatility**
- **Exceptional oxidation stability**
- **Compatibility with a wide array of additives for formulating flexibility**

FEATURES

Chevron Neutral Oils are all-hydroprocessed, highly refined API Group II/II+ paraffinic base stocks. Their extremely low sulfur, nitrogen, and aromatic content give them excellent thermal and oxidation stability. These base oils provide excellent cold flow performance because the ISODEWAXING® catalyst and technology convert almost all of the wax in the feed into very stable, branched isoparaffins.

Chevron Neutral Oils offer the following characteristics relative to typical Group I (solvent refined) base stocks:

- Lower volatility and cold cranking simulator (CCS) viscosity to meet modern engine oil specifications
- Better oxidation and thermal stability
- Lower aromatics, sulfur and nitrogen
- Improved response to pour point depressants
- Improved soot dispersancy in heavy duty motor oil formulations

Chevron Neutral Oils 100R, 150R, 220R, and 600R are API Group II base stocks with a typical viscosity index of 99-103.

Always confirm that the Chevron product selected whether combined with other base oils/additives or used alone will meet the required usage specifications or original equipment manufacturers recommendation for the equipment operating conditions and customer's maintenance practices.

A **Chevron** company product

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Chevron Neutral Oil 110RLV is a 5 cSt Group II "plus" base stock with a typical viscosity index of 115-117. It was designed to meet the strict volatility requirements of modern engine oils while maintaining API Group II status to simplify qualification programs and to provide interchangeability of Chevron base stocks with other approved stocks. Chevron 110RLV enables blenders to minimize the amount of more expensive Group III oils needed for the most stringent 10W-XX and 5W-XX motor oil requirements.

Chevron Neutral Oil 60R is a light viscosity oil that is typically used in light industrial oil applications, electrical insulating oils, as well as other specialty lubricants and process oils.

Chevron Neutral Oils are non-toxic and meet **U.S. Food and Drug Administration (FDA)** requirement 21 CFR 178.3620(c) for components of nonfood articles.

APPLICATIONS

When combined with properly selected additives, Chevron Neutral Oils are ideal for blending a wide variety of finished products, including:

- Passenger car motor oils
- Heavy duty motor oils
- Industrial engine oils
- Tractor hydraulic fluids
- Transmission fluids
- Gear oils
- Greases
- Hydraulic oils
- Ammonia refrigeration oils
- Paper machine oils
- Turbine oils
- Process oils
- Lubricant additives

Chevron Neutral Oil — Continued

- Heat transfer fluids

TYPICAL TEST DATA

		60R	110RLV	100R
<i>Product Number</i>		240664	255623	240667
<i>SDS Number</i>		30963	25003	6986
API Base Stock Category	(API 1509 E.1.3)	Group II	Group II+	Group II
API Gravity	ASTM D1298	32.9	36.0	34.4
Specific Gravity at 60/60°F	ASTM D1298	0.861	0.845	0.853
Density, lb/gal	ASTM D1298	7.167	7.034	7.102
Viscosity, Kinematic cSt at 40°C cSt at 100°C	ASTM D445	10.5 2.6	21.7 4.45	20.0 4.08
Viscosity, Saybolt SUS at 100°F	ASTM D2161	64	113	106
Viscosity Index	ASTM D2270	70	117	102
Cold-Cranking Simulator cP at -30°C cP at -25°C cP at -20°C cP at -10°C	ASTM D5293	— — — —	2450 1300 — —	2650 1325 — —
Pour Point, °C	ASTM D97	-33	-15	-15
Evaporation Loss, NOACK, wt %	CEC-L-40-A-93	—	16	25
Flash Point, COC, °C	ASTM D92	165	206	206
Color	ASTM D1500	L 0.5	L 0.5	L 0.5
Sulfur, ppm	Chevron	<6	<6	<6
Water, ppm	ASTM D1744	50	<50	<50
Saturates, HPLC, wt %	Chevron	>99	>99	>99
Aromatics, HPLC, wt %	Chevron	<1	<1	<1

Minor variations in product typical test data are to be expected in normal manufacturing.

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TYPICAL TEST DATA

		150R	220R	600R
<i>Product Number</i>		581595	246748	246747
<i>SDS Number</i>		11858	6986	6986
API Base Stock Category	(API 1509 E.1.3)	Group II	Group II	Group II
API Gravity	ASTM D1298	34.0	32.1	31.0
Specific Gravity at 60/60°F	ASTM D1298	0.855	0.865	0.871
Density, lb/gal	ASTM D1298	7.119	7.202	7.251
Viscosity, Kinematic cSt at 40°C cSt at 100°C	ASTM D445	29.4 5.24	41.0 6.3	106 12.0
Viscosity, Saybolt SUS at 100°F	ASTM D2161	150	212	530
Viscosity Index	ASTM D2270	112	102	102
Cold-Cranking Simulator cP at -30°C cP at -25°C cP at -20°C cP at -10°C	ASTM D5293	5070 2660 1400 —	— 5600 3200 —	— — — 4800
Pour Point, °C	ASTM D97	-15	-15	-15
Evaporation Loss, NOACK, wt %	CEC-L-40-A-93	14	11	2
Flash Point, COC, °C	ASTM D92	220	230	265
Color	ASTM D1500	L 0.5	L 0.5	L 0.5
Sulfur, ppm	Chevron	<6	<6	<6
Water, ppm	ASTM D1744	<50	<50	<50
Saturates, HPLC, wt %	Chevron	>99	>99	>99
Aromatics, HPLC, wt %	Chevron	<1	<1	<1

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