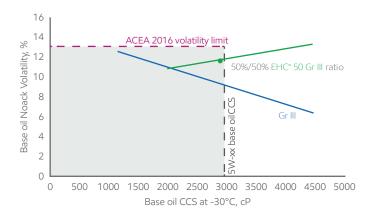


# ExxonMobil EHC™ Group II/II+ base stocks offer advantages in PCMO formulations

It all begins with the design of our base stocks, which are engineered to enable high-performing lubricants.

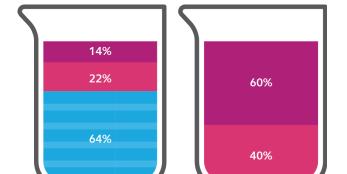
EHC<sup>™</sup> 50 base stock is well designed to formulate "short claim" SAE 5W-XX oils.\*





EHC<sup>™</sup> 50 enables cost effective formulations for short claim 5W-XX PCMO





EHC~ 50 Group III Light Neutral Group III Medium Neutral

SAE 5W-30 ACEA C3 MB 229.31

Potential to reduce
Group III use by up to

\*Dependent on additive chemistry and formulation approvals. ExxonMobil estimates with applicable additive packages. External factors, such as price and quality variation, VM diluent oil, etc. may cause deviations from these estimates; they are intended to be starting points for formulation evaluations. Lubricant Blender is responsible for obtaining appropriate approvals and licensing of all formulations.

## ExxonMobil EHC™ Group II/II+ base stocks offer advantages in PCMO formulations

Example 10W-40 oils

### Base oil properties for SAE 10W-40 ACEA A3/B4 lubricant

	EHC <sup>™</sup> 50/120	LN Gr III/MN Gr II
KV @ 100°C, cSt (ASTM D445)	5.8	5.7
VI (ASTM 2270)	112	111
CCS @ -25°C, cP (ASTM D5293)	3091	3182
Noack Volatility, % (ASTM D5800)	10.4	12

For an SAE 10W-40, ACEA A3/B4 lubricant at equal KV100 and CCS @ -25°C.

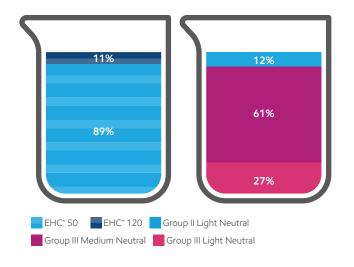
EHC™ Group II/II+ base stocks blend\* enables

### lower

Noack volatility vs. traditional Group II/Group III base stocks blend.

> Example 10W-40 oils

#### SAE 10W-40 ACEA A3/B4



EHC™ Group II/II+ base stocks enable the formulation of lubricants with 0% Group III and lower volatility.\* (10.3% vs 11.8%)



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